

**Private protected areas as institutional innovation in nature
conservation:
an empirical study on their emergence and assessment of
their social and ecological fit**

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DECLARAÇÕES

Declaro que esta tese é o resultado da minha investigação pessoal e independente. O seu conteúdo é original e todas as fontes consultadas estão devidamente mencionadas no texto, nas notas e na bibliografia.

A candidata,



(Giulia Iannuzzi)

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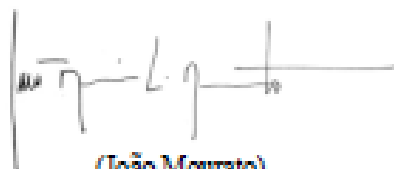


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O coorientador,



(João Mourato)

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“Viagem: o modo de manter permanentemente viva a tensão entre as raízes e as opções. Sem viagens, as raízes são prisões e as opções são voluntarismos inconsequentes.” (Boaventura de Sousa Santos)

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Private protected areas as institutional innovation in nature conservation: an empirical study on their emergence and assessment of their social and ecological fit

Giulia Iannuzzi

ABSTRACT

Private Protected Areas (PPAs) are increasingly considered a promising complement to public-run protected areas. Their rapid proliferation worldwide and increased adoption as policy tools, have made the PPA phenomenon one of the most important in current nature protection strategies. Nevertheless, there has been little scholarly attention paid to their emergence and the implications of their implementation, especially in Europe. This dissertation explores the genesis of PPAs as innovative institutional arrangements for conservation policies and investigates their suitability for enhancing nature conservation without neglecting social issues. To begin with, an investigation into PPAs used as policy tools in European countries, showed that PPA institutional models resemble public-private partnerships that differ among countries: in the roles of public actors as regulators and facilitators for the involvement of private actors, and in the distinct typology of the latter. Hence, in countries that have centered their conservation policy on public-run protected areas and top-down approaches, PPA adoption appears to be an emblematic result of a change in governance towards voluntary approaches and partnerships with non-state actors. The research focus then shifts to Portugal, where PPA adoption clashes with the centralized top-down institutional heritage. A diachronic analysis on non-state actors' involvement in the establishment and management of protected areas revealed that the privately governed protected areas are not a recent model within the national system of conserved areas. However, the novelty of the current model lies in its emergence against a backdrop of conservation

governance rescaling and restructuring and the professionalization of NGOs, which has resulted in access to international funding for conservation. The subsequent research line aims to question the suitability of PPAs to protect nature in a socially just way, challenging a dichotomous viewpoint, alternatively presenting PPAs as a panacea or rejecting them altogether as neoliberal techniques. To do so, we developed a multi-criteria assessment framework, which draws on the concepts of social and ecological institutional fit and is underpinned by a socio-ecological system approach. This framework is applied to the case of the Faia Brava natural reserve. Our findings suggest that the current Portuguese PPA institutional model, is unable to avoid the (re)production of some of the drawbacks and social issues usually associated with top-down regulations in public-run protected areas, nor to elude the risk of advancing a neoliberal conservation. The main issues to be addressed include the risk of allowing a concentration of land to be placed into the hands of private actors without guarantee of long-term protection; the lack of recognition criteria aimed to target the most endangered sites; the lack of public funding that would avoid a tendency towards nature commodification. Alongside the development of the socio-ecological assessment tool, this dissertation provides new insights into the debate on the government to governance shift in nature conservation, with empirical contributions regarding the institutional arrangements and practices of PPAs. An additional key contribution, with respect to the overarching research approach, is a reflection on the meta-theoretical bases offered by Critical Realism, to advance our understanding of policy change and socio-ecological systems.

KEYWORDS: private protected areas, nature conservation, socio-ecological systems, institutional fit, environmental governance, good governance criteria.

RESUMO

As Áreas Protegidas Privadas (APPs) são consideradas um complemento promissor às áreas protegidas públicas. A sua rápida proliferação como ferramentas das políticas de conservação da natureza, tornaram o fenómeno das APPs um dos mais importantes a nível mundial em termos de estratégias de proteção ambiental. Contudo, há poucos estudos sobre o seu surgimento e as consequências da sua implementação, especialmente na Europa. Esta dissertação explora a génese das APPs como modelos de inovação institucional no contexto das políticas de conservação e investiga a adequação dos mesmos para uma preservação da natureza integradora das questões sociais. Começou-se por explorar as APPs como instrumento de política pública em países Europeus. O estudo comparativo mostrou que as APPs têm características de parcerias público-privadas e diferem pela configuração do papel do ator público, como regulador e facilitador do envolvimento de atores privados, e pela tipologia destes últimos. Em países que centraram a sua política de conservação na implementação de áreas protegidas públicas e em abordagens *de cima para baixo*, a adoção das APPs parece emblemática de uma mudança no sentido da promoção de abordagens voluntárias e parcerias com atores privados. Seguidamente, a investigação centrou-se em Portugal, onde a adoção das APPs colide com uma tradição de *administração* pública centralizada. Uma análise diacrônica sobre o envolvimento de atores não estatais (i.e. administração central) no estabelecimento e gestão de áreas protegidas, revelou que as APPs não são, contudo, uma alternativa recente. A novidade do modelo atual situa-se no seu surgimento no contexto de uma reestruturação da *governança* da conservação e da profissionalização das ONGs, e.g. no acesso a financiamentos internacionais. A linha de pesquisa subsequente questionou a capacidade das APPs de levar a cabo a sua função de proteção da natureza de maneira socialmente justa, desafiando um debate dicotômico, que as apresenta alternativamente ou como uma panaceia ou as rejeita por completo como soluções neoliberais. Para isso, desenvolveu-se uma ferramenta de avaliação multicritério baseada no conceito de encaixe institucional e sustentada por uma abordagem socio-ecológica. O enquadramento desenvolvido foi aplicado ao caso de estudo da reserva natural da Faia Brava. Esta investigação sugere que o atual modelo

português para as APPs não é capaz de evitar a (re)produção de conflitos e problemas sociais associados às áreas protegidas públicas, nem evitar o risco de emergência de uma abordagem neoliberal de conservação da natureza. As principais questões incluem o risco de concentração de terras nas mãos de atores privados sem garantia de proteção da natureza a longo prazo; a falta de critérios de reconhecimento de APPs que privilegie os sítios mais ameaçados; e a falta de financiamento público destinado a evitar a mercantilização da natureza. Para além do desenvolvimento desta ferramenta de avaliação, contribui-se para o debate sobre a mudança do modelo de governança da conservação da natureza em Portugal, com contributos empíricos sobre modelos e práticas das APPs. Um contributo adicional é uma reflexão sobre as bases meta-teóricas que o Realismo Crítico oferece para avançar o nosso entendimento sobre as mudanças nas políticas públicas e nos sistemas socioecológicos.

PALAVRAS-CHAVE: áreas protegidas privadas, conservação da natureza, sistemas socioecológicos; encaixe institucional, governança ambiental; critérios de boa governança.

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CHAPTER 1. INTRODUCTION

1.1 Problem setting and study relevance

1.1.1 The unsustainable anthropogenic impact on nature: a global challenge

The increasingly interconnected world we are living in is characterized by a great acceleration of changes and multiple and convergent crises (Steffen *et al.*, 2015a; Colvile, 2016). We are currently facing environmental, public health, social and economic crises with a multidimensional nature.

In particular, the Anthropocene perspective emphasizes the profound impacts of human activities on the Earth system. The growing influence of human actions, to the point of constituting an evolutionary pressure, has led scholars to define the current epoch the “human-dominated geological epoch” (Lewis and Maslin, 2015; Malhi, 2017). Concurrently, the notion of planetary boundaries sets forth the urgent need in limiting anthropogenic perturbation, which is irreversibly altering the bio-physical carrying capacity of our planet, affecting non-human life and threatening human life supports (Steffen *et al.* 2015b).

Hence, multifaceted and overlapping environmental changes are major threats we are confronted with. They are intimately linked with other prime societal concerns affecting for example the ability of enjoying human rights to life, security and health (Bell, 2011). Environmental issues also encompass a relevant economic dimension, as shown by the estimated impacts of climate change and nature degradation on GDP (e.g. Stern, 2006; TEEB, 2010).

In particular, biodiversity loss and nature degradation are of utmost scientific and policy relevance today. As reported by scientific assessments, conducted at local and global scales, biodiversity loss is occurring at unprecedented rates (Millenium Ecosystem Assessment-MEA, 2005; Murphy and Romanuk, 2014). Natural and semi-natural habitats are being degraded, species richness is declining. For example, according to the Red list of the International Union for Conservation of Nature (IUCN) more than 31.000

species, corresponding to more than 27% of assessed species, are threatened with extinction¹.

Moreover, it is important to consider that the actual magnitude of biodiversity loss is difficult to estimate due to the still incomplete picture we have of the living organisms on our planet (Kindsvater *et al.*, 2018). Consequently, potential feedbacks could unexpectedly lead to worst scenarios with abrupt transformations globally or locally.

Interacting drivers of biodiversity loss, mostly anthropogenic, include land use change (e.g. agriculture and forestry intensification), overexploitation and unsustainable use of resources, pollution and invasive alien species (Maxwell *et al.*, 2016). Biodiversity decline is also linked with climate change, which is already altering ecological dynamics and causing shifts of species ranges, consequently challenging implemented nature conservation actions (Pecl *et al.*, 2017).

Nature degradation and the reduction of habitats, species and genetic richness, as well as the decline of their abundance and change of distribution, have consequences on the delivery of ecosystems services on which livelihoods depend on. The concept of ecosystem services, while still controversial, has been advanced to mainstream the recognition of the contributions/services that ecosystems provide to human well-being² (MEA, 2005). Overall, this growing research field has supported an increasing recognition of the urgency of fostering nature conservation.

Against this background, in the last decades there has been a growing call for governance solutions seeking to reverse negative trends and to prompt a transition towards socio-ecological sustainability. We have witnessed the proliferation of international and national agenda for action and the adoption of multilateral agreements. As an illustration of the most recent efforts at global scale the aim of the goal n. 15 of the United Nations (UN) 2030 Agenda for Sustainable Development is to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably

¹ www.iucnredlist.org (Accessed: 28/04/2020).

² Benefits encompass provisioning, regulating and supporting services as well as cultural services (MEA, 2005).

manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. It heavily relates on the Aichi targets and indicators, adopted in 2010 under the Convention on Biological Diversity (CBD).

In addition, the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) was launched in 2010 as an intergovernmental body open to UN member countries, aiming to strengthen the science-policy interface.

1.1.2 Questioning our direction

Despite the abovementioned endeavours, empirical studies show that many contemporary attempts and management responses are falling short (Mazor *et al.*, 2018). Our societal responses seem to be struggling in complex interdependences, misrepresentative simplicity in analysing a wicked societal problem and the perpetuation of unproven claims and misleading narratives (Nicholson, 2014; Meuleman, 2013).

Firstly, lack of data is often addressed as an issue that poses a major challenge to scientists and policymakers, undermining predictability and monitoring. Scant knowledge seems to be caused not only to insufficient research efforts, but also to the features of biodiversity loss as a *wicked problem*. This concept has shed light on the systemic complexity of nature degradation and on its highly dependence on its understandings and conceptualizations, due to the multiple values and interests associated with (Sharman and Mlambo, 2012; Levin *et al.*, 2012).

Secondly, another concern is the perpetuation of misleading narratives. In particular, many scholars have expressed concerns regarding the de-politicization of the sustainability paradigm which overshadows conflicts inherent to any societal transformation aimed to reduce current anthropogenic pressures (Avelino and Rotmans, 2009; O’Riordan, 2014). Others have warned against the myth of win-win solutions and panacea, that is promising policy options promoted to address both biodiversity loss and human development disregarding the peculiarities of the local context (Muradian *et al.*, 2013).

These intertwined issues contribute towards the risk of wasting institutional resources to design and implement multiple novel solutions that do not tackle the underlying drivers of nature degradation and may even be counterproductive, creating those issues that should be addressed in the first place (see also Muradian *et al.*, 2013). As put by Töpfer (2013: vi) *“Are we running too fast whilst not sufficiently questioning the direction in which we are running?”*.

It is within this context that this thesis intends to contribute focusing on Private Protected Areas (PPAs) as institutional arrangements for nature conservation. PPAs are protected sites under voluntary long-term conservation, owned and managed by private actors (e.g. individual landowners, non-governmental organizations - NGOs, companies).

International organizations have recently heavily promoted this model as complement to public-run protected areas (IUCN, 2016). Concurrently, over the last decades, PPAs have appeared in national conservation strategies and biodiversity action plans, and their designation has witnessed a remarkable increase. PPAs phenomenon appears to be one of the most important in current nature protection strategies worldwide and is expected to keep growing (Drescher and Brenner, 2018).

Despite PPAs growing momentum, there is a lack of knowledge on their worldwide diffusion, the peculiarities of their institutional arrangements and their potential implications for nature conservation. In particular, most of the research investigates cases in the United States, Australia-where conservation on private lands by private landowners and land trusts began relatively early and/or is nowadays well established - Canada, some Latin American countries and South Africa (Capano, 2019; Stolton *et al.* 2014). A gap of literature has been especially identified for European countries (Capano, 2019).

In order to avoid an uncritical commitment to policy options that can potentially lead to counterproductive or no positive outcomes for long-term nature conservation, there is a need to question PPAs suitability as complementary policy tools for nature conservation policies.

1.2 Research background

1.2.1 Private protected areas within a polycentric governance context

The first “modern” public systems of protected areas, entailing the acquisition of private land by the state or the imposition of restrictions, dates back to the second half of the 19th century (Phillips, 2004). Instead, voluntary strategies for nature conservation on private land have their origins in the game and hunting reserves in medieval Europe (Runte, 1979 *apud* Langholz, 2010). Nowadays, privately protected areas significantly complement the public protected areas systems in North America, some Latin American countries (e.g Chile), Australia and southern Africa (Stolton *et al.*, 2014).

Privately protected areas history and diffusion as well as their statutory recognition, vary considerably among countries (Hora *et al.*, 2018). A significant variability is also documented as regards their legal status and the mechanisms used to establish them (based on private legal tools or public law), mainly depending on the legal systems and forms of land tenure (Gloss *et al.*, 2019).

Although privately conserved areas are not a new phenomenon and rely on a variety of institutional arrangements, studies have pointed out a common trend: their increased proliferation, growing statutory recognition and promotion over the past decades, even in countries whose national systems only included state-owned and state-run protected areas (see Mitchell *et al.*, 2018). This has taken place against the backdrop of an intensification of actors’ interplay at multiple levels that has resulted in a dynamic governance context wherein policy is formulated and implemented (Driessen *et al.*, 2012; Paavola *et al.*, 2009) (see figure 1.1).

Particularly, research on PPAs as a policy tool should consider a proliferation of flexible and hybrid solutions for nature conservation (Wurzel *et al.*, 2013), backed up by a growing consensus on the need to involve multiple actors from the public and private sector. As a result, mandatory approaches, based on top-down protected areas designation or land acquisition by state actors, have been complemented (or replaced) with more collaborative partnerships with local public actors (Apostolopoulou *et al.*,

2014), environmental NGOs, as well as with landowners through voluntary agreements (e.g. payments for environmental services) (Santos *et al.*, 2015; Lockwood, 2009).

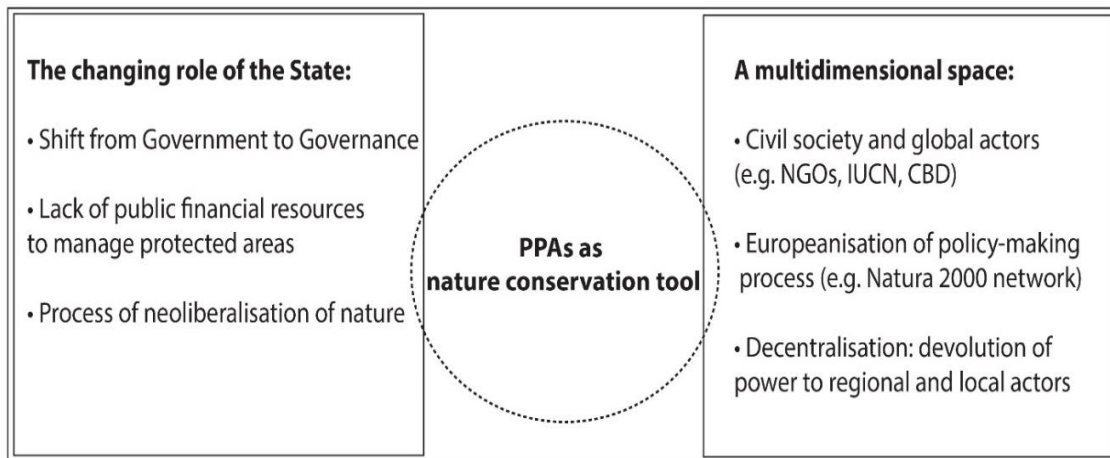


Figure 1.1 PPAs and the dynamic multilevel governance space

The abovementioned dynamics in part resonate the functional integration of “*globally organized management institutions,(...) and coordinated strategies*” that cross the boundaries in order to tackle global issues (Zimmerer, 2006: 1). However, the complexification of polycentric governance, has taken place under distinct influences and broader political and social contexts.

Besides the functionalist explanation, Lockwood (2010) suggested additional overarching drivers encompassing: i) an increasing demands for the opening up of decision making to local stakeholders inputs accompanied with the recognition of indigenous people’s right in reaction to displacements from protected lands (see also Jeanrenaud, 2002) ii) the intensification of the elements of a neoliberal agenda in the conservation policy domain, that increasingly relies on markets creation and on “self-sufficient” individuals as stewards of the environment (see also Büscher *et al.*, 2012; Castree, 2008).

1.2.2 A contested complementary policy tool

Because of their voluntariness PPAs are expected to avoid conservation-induced displacements and top-down mandatory restrictions on the use of natural resources,

often suffered by local communities in public protected sites (Brockington and Igoe, 2006; Agrawal and Redford, 2009). Moreover, the consequent reduction of local oppositions is expected to favour the success of conservation measures.

The support of PPAs establishment is also justified on grounds of their ability to mobilise new sectors of society (e.g. environmental NGOs, companies) and leverage non-state actors resources and capabilities. This is a powerful argument when facing the decrease in public resources for conservation. Accordingly, PPAs are expected to play a relevant role in the future development of national networks of protected areas, to increase their coverage, enhance connectivity among protected sites and contribute to ecological representativeness of the network.

The advocates of PPAs especially emphasize the abovementioned potentialities for those countries with a high percentage of land under private ownership where a significant part of the remained threatened biodiversity is located. Here PPAs hold the promise of being a crucial ally in meeting international commitments towards global conservation targets³.

On the other hand, criticisms point out challenges that PPAs face in delivering long-term conservation. For instance, a significant rate of PPAs degazettement has been documented in South Africa (Vos *et al.*, 2019). Further, a growing number of scholars have warned about the negative social outcomes that PPAs establishment might entail, pointing out, for example, their vocation in perpetuating and even accentuating pre-existing socio-economic inequalities (see Slovak, 2017). Critical scholarly research has argued that PPAs are a form of neoliberal conservation (see Holmes and Cavanagh, 2016), which provide context for market-based mechanisms and entail negative consequences hampering the path towards a more *just* nature conservation (Adams, 2019; Adams *et al.*, 2014). It is however important to note that empirical studies have especially focused on PPAs practices in the Global South and Anglo-Saxon countries. A geographical bias that we intend to contribute to redress.

³ The Aichi Target n. 11 calls for the conservation, by 2020, of at least 17% of terrestrial and inland water, and 10% of coastal and marine areas through well connected systems of protected areas and other effective area-based conservation measures (retrieved from: <https://www.cbd.int/aichi-targets/target/11>).

One of the main aim of this study is to challenge the dichotomous perspective that has so far characterized the (still limited) debate on PPA. In order to avoid both an uncritical commitment to PPA and a rejection of them as policy instrument, it is urgent to explore under which institutional settings and broader conditions they are able to protect the environment without entailing negative social consequences. To do this, we will draw on the concepts of social and ecological fit.

1.3 Research questions

PPAs warrant both an in-depth investigation as regards their outcomes, as well as a contextualisation in terms of the governance dynamics that brought to use as policy instruments with their specific institutional settings. In particular, shedding light on the latter is crucial to fully grasp the implications of the implementation of PPAs institutional settings and to enable a better informed discussion on their suitability.

This study is developed throughout two research lines. The research line A aims to explore PPAs emergence as conservation policy instruments. It will address the research questions 1 and 2 (see below). Portugal has been selected as focus of analysis since the introduction of PPA as policy tools for conservation clashes with the Portuguese centralised top-down institutional heritage.

Research question 1: *What are the features of PPAs institutional model in European countries?*

Research question 2: *How and why did PPAs emerge as a complementary institutional model for Protected Areas in Portugal?*

The research line B aims to shed light on PPAs impacts on socio-ecological systems and is more policy-oriented. It will address the research questions 3.1 and 3.2.

Research Question 3.1: *To what extent are current Portuguese PPAs institutional settings able to address social fit and ecological fit?*

Research Question 3.2: *Under which conditions are current Portuguese PPAs institutional settings able to address social fit and ecological fit?*

In order to address the research questions, the focus of the study will follow a zoom in progression in the scale of analysis, encompassing a comparative analysis of PPAs institutional settings in four European countries, an investigation on the emergence of a policy framework for PPAs in Portugal and the assessment of the ecological and social fit of a Portuguese PPA. The rationale underpinning the selection of case studies will be presented in chapter 2, as well as sub-questions and research methods.

1.4 Expected contributions

This study aims to provide significant and diverse contributions to the existing body of research by examining the institutional arrangements of PPAs, their emergence and the extent to which they are able to enhance nature conservation whilst meeting societal needs.

First, it offers a substantial *conceptual contribution* expanding the existent definitions of PPAs. Focusing on PPAs with statutory recognition as policy tools for nature conservation, it advances a conceptual/descriptive framework, which considers the involvement of state and private actors. The key purpose is to develop a frame of reference which helps to systematize institutional models for those PPAs whose establishment and/or management involve state actions.

As regards *empirical contributions*, this study aims to add evidences from European countries in particular from Portugal to the growing body of PPAs literature. By doing this, it seeks to fill the identified literature gap, that is the lack of studies on PPAs in those European countries where public policy strategies for nature protection have been traditionally based on state-run protected areas.

Building on the empirical and conceptual additions to the state-of-art, this research also advances an explanation of the emergence of PPAs as peculiar institutional arrangements. For this purpose, this research structures a critical analysis of governance dynamics within which the (re)shaping of partnerships between state and non-state actors has taken place in Portugal. This contribution strives to give *new insights to the debate* over the shift from regulatory approaches to co-design and co-management of protected areas.

In addition, a relevant *methodological contribution* of this dissertation lies in the development of a framework for the assessment of the social and ecological fit of institutional arrangements for PPAs.

This study also envisages to offer a *meta-theoretical contribution* to the field of environmental governance. In particular, it discusses the meta-theoretical bases that Critical Realism, as a philosophical research approach, offers to advance our understandings on public policies change and to address issues regarding socio-ecological systems.

Finally, the insights gained from this multifaceted study strive to inform policy-makers and practitioners. Although no ready-made solution will be given, empirical evidences and the proposed conceptual and analytical frameworks aim to act as a catalyst and to guide the review of the current models of PPAs. The ultimate objective is to pave the way for the design of PPAs institutional models with an improved socio-ecological fit. This practical inclination is a means to address a personal engagement. It has also been reinforced by the aspirations of Critical Realism and transition management studies. Both seek to have societal relevance inspiring or accelerating a change-oriented policy agenda.

1.5 Thesis structure

This dissertation is organized into eight chapters. Chapter 2 begins by outlining the meta-theoretical bases underpinning this study. Then it presents in detail the research design that enable us to address the research questions identified in this introduction.

Chapter 3 presents the object of our inquiry, that is, the peculiar characteristics of PPAs among a broad array of approaches for conservation on private land. A review of the literature on PPAs is complemented with an analysis of PPAs' institutional models' part of national systems of conserved areas in four European countries.

Chapter 4 provides a conceptual and theoretical framework to explore the shift from government to governance in nature conservation policies. Drawing on this, Chapter 5 explores PPAs emergence in Portugal, contextualizing it within governance

dynamics that have concerned the involvement of non-state actors in the establishment and management of protected areas.

Chapter 6 is devoted to the development of a diagnostic framework for assessing the suitability of the institutional settings for PPAs to enhance nature conservation whilst meeting societal needs. In particular, multiple criteria are proposed to translate the intertwined dimensions of the concepts of social and ecological fit. In Chapter 7 the framework is used to guide the analysis of the Faia Brava natural reserve, since 2010 the only PPA that have received statutory recognition in Portugal.

Chapter 8 recapitulates the main findings. It ends by presenting the limits of the investigation and future research directions.

CHAPTER 2. ONTOLOGICAL STANDPOINT AND EPISTEMOLOGICAL SETTINGS

2.1 Introduction

This chapter outlines the philosophical underpinnings of this thesis. Here we clarify the ontological and epistemological foundations of our research questions and methodological framework. In other words, this chapter outlines the researcher's *worldview*, *how* this research problem fits within it, *why* it is relevant and *how* it is understood and explained.

From this meta-theoretical point of departure, this chapter engages in the definition of the research problem and identification of the related research questions, and outlines how the necessary data is gathered and analysed as well as the strategy to integrate the different research components. Particular attention is given to the discussion of the legitimacy and validity of the research outcomes.

Structure-wise this chapter has two sections. The first introduces and justifies the meta-theoretical approach to this investigation: *Critical Realism*. Subsequent methodological implications are presented and discussed especially: i) a brief look onto the emancipatory intent of a critical investigation; ii) the relevance and necessity of an interdisciplinary research approach; iii) the choice of the case-study method.

The second section expands on chapter 1. The latter outlined the research problem, research questions, key aims and expected contributions of the research. Here we will focus on i) the rationale underpinning each research question and their role within each of the two research lines; ii) how these have been addressed in terms of methods for data collection and analysis, iii) and rationale for case study selection.

In sum, in this chapter we explain how research has been conducted and on which foundations, and how its findings are presented throughout the dissertation.

2.2 Critical Realism as a research approach

2.2.1 Going beyond the epistemic fallacy

The choice of ontological and epistemological perspectives has significant implications. It influences the research objective we seek and how we study objects or events. In essence, it defines how we conduct research⁴. In this sense, this research springs from Critical Realism, a post-positivist paradigm⁵ that combines ontological realism and epistemological relativism.

Critical Realism has developed as a philosophy of science in the 1970s, mobilized by the first works of Roy Bhaskar (2008 [1975]) and Rom Harré (1970). Critical Realism has a pluralistic nature, a variety of perspectives and conceptualizations that mirror its different evolution paths (Vandenberghe, 2014; Næss, 2015). By exploring the differences and common ground with other philosophical approaches in this section we briefly outline its key features.

Researchers committed to Critical Realism move from a transcendental approach⁶ and adopt a critical attitude towards the principles of positivism and its conception of science. Positivism is embraced by natural scientists as well as social scientists who conduct their research with the aim of proving theories of regular causal connections. They aim to verify *a priori* hypotheses, usually stated expressing functional relation between variables (Saunders *et al.*, 2016). In turn, critical realists do not reject the *implicit* positivist ontology holding that a reality does exist out there. Notwithstanding, they move beyond a form of naïve objectivism, which claims to capture the laws of nature in simple formulas, and the positivist project of rejecting the metaphysics of nature (McWherter, 2012).

⁴ Concisely, whereas ontology is concerned with the nature of reality, epistemology is concerned with the nature of knowledge.

⁵ See for instance Guba and Lincoln (2005) for i) a review of alternative inquiry paradigms (e.g. positivism, post-positivism, critical theory and constructivism) outlining the fundamental issues that differentiate them and ii) a discussion about their commensurability.

⁶ Transcendental argumentation focuses on the conditions that can sustain the possibility and necessity of intelligible scientific knowledge (McWherter, 2012). In particular, Bhaskar addressed the following question: what are the necessary conditions for the empirical practice of science to be possible? (Næss, 2015).

On the neglect of ontology in respect of epistemology, Roy Bhaskar warned about *“the view that statements about being can always be transposed into statements about our knowledge of being”* (Bhaskar, 2008 [1975]: 5). He argued that experiments in natural science domains are conducted in closed systems; only in these manipulated circumstances can certain causes lead to certain effects with regularity. Thus, generalizing findings not accounting for the artificially produced experimental settings, leads to the coincidence of the intransitive (ontological) dimension of the reality with the transitive (epistemic) dimension that is created by the researchers (McWherter, 2012). Put it differently, Bhaskar’s critique is that reality goes beyond what we know about it and there lies the fallibility of our knowledge and predictions.

In short, the epistemic fallacy questions the validity of positivism in natural sciences as the positivist scientist conducts an experimental rather than an empirical science, closing and controlling the almost entirely open system where relationships between variables take place. In social sciences, spontaneous partially closed systems occur even more rarely than in natural systems (Næss, 2015) and the complexity of the intertwined causal mechanisms simultaneously at play (including the researcher role) adds surmountable difficulty to the construction of artificially closed systems.

2.2.2 A differentiated and stratified reality: how should we approach it?

According to critical realist ontology the world - in nature and in society - is differentiated and stratified. In particular, Critical Realism distinguishes between “the real”, “the actual” and “the empirical” (Bhaskar, 2008 [1975]), which have a relational nature (Jessop, 2005) (see table 2.1).

Empirical	Observations, experiences and perceptions of actual events
Actual	Events resulting from the real tendencies and causal mechanisms
Real	Generative underlying tendencies, causal mechanisms

Table 2.1 - The distinct ontological domains. Source: adapted from Fleetwood (2014)

Critical Realism brings underlying tendencies and causal mechanisms to the fore. It stresses that these can be real but not exercised or realized yet or that these can be working even when not detected by human perception (Vandenberghe, 2014).

Critical realist research aims therefore to explain observable phenomena by accessing its inner mechanisms and attempting to uncover the causal structures underlying the “empirical”. Analysing causal mechanisms at work implies an analysis on *how* they work and interrelate, in order to uncover their contextual constraining and enabling factors. Prediction-making aside, such analysis allows for a discussion on the potential consequences of mechanisms working in different contextual settings.

Notwithstanding, critical realists acknowledge that research efforts do not guarantee the production of “true” knowledge as our understanding of reality is partial (Sayer, 2000). As put by Sayer (2000) a mind-independent physical and social world exists outside human experience and apart from the human apprehension of it. Hence, Critical Realism is not nomothetic (law-seeking) since it rejects causal laws intended as cause-effect regularities (i.e. constant conjunctions of events). Even when regularities are found, the point is to explain what produces them (Fairclough *et al.*, 2002). In Reed’s words, Critical Realism doesn’t “*search for timeless and universal explanatory truths uncontaminated by the complexity of history, language, ideology and discourse*” (2001 *apud* Wikgren, 2005: 13).

Hence, critical realists acknowledge the fallibility of human knowledge. They point out that knowledge is theory dependent and, in broader terms, socially determined. Cultural belief, social and political frameworks, as well as power relations within society⁷ (Dickens, 2003), influence research approaches. In this view, intersubjective production of meanings, individual knowledge resources and meta-theoretical paradigms can also be considered as causal mechanisms, since they can induce change (Næss, 2015; Fairclough *et al.*, 2002). This has relevant implications as the role of the researcher is concerned. As Jessop (2005) pointed out, the work of social

⁷ Foucault (1980: 52) illustrated the relationship between knowledge and power as follows “*the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power*”.

sciences researchers can/may transform the social world, which begs a combination of an explanatory and interpretive analysis⁸.

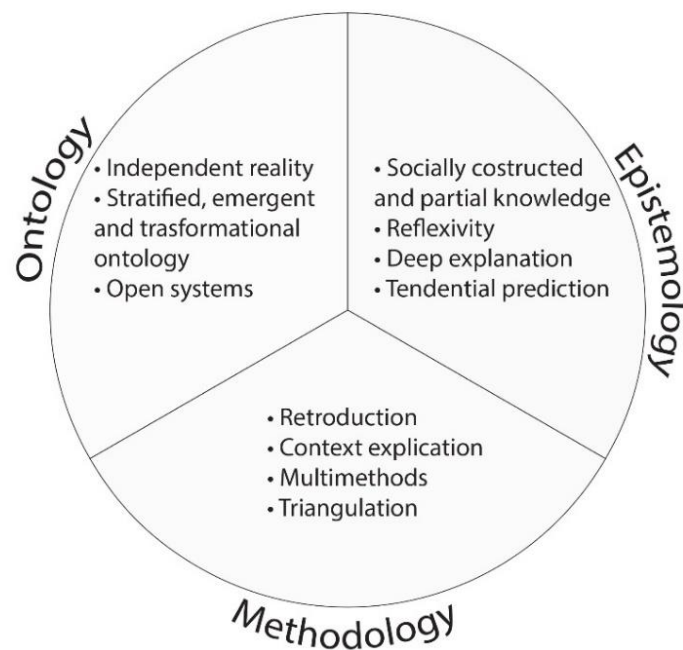


Figure 2.1 - The main tenets of Critical Realism

Against this backdrop, Critical Realism sits as a third way for natural and social sciences between empiricism and relativism (Sayer, 2000). It goes beyond radical positivism but it also recognizes its scientific endeavours instead of overriding them, thus avoiding the excess of constructivism and relativism (Vandenberghe, 2014; Dickens, 2003). Instead of perpetuating a dualistic perspective characterized by the either/or logic, it attempts find a balance between the two extremes building upon an ontological realism and an epistemological relativism.

Remarkably, the explanatory critique is the foundation on which to build an emancipatory philosophy. Science is seen as the best source of well grounded

⁸ For instance, semiotic analysis - understood as the study of intersubjective production of meanings through critical discourse analysis - is believed to deliver a comprehensive study of the social word (Fairclough et al., 2002). Likewise, hermeneutics sets out to gain insights into human cognitive activities, such as reasons and motivations underlying human action (Naess, 2015; Fleetwood, 2014).

knowledge that uncovers erroneous understandings holding oppressive social arrangements (Hammersley, 2002). This is done not only “digging deeper”, but also using an interpretative analysis and constantly subjecting scientific development to critique (Dickens, 2003). For these reasons, we can say that Critical Realism approach shares common ground with critical social sciences⁹.

Having laid out the main ontological and epistemological tenets of Critical Realism (see figure 2.1), the following sections explore its methodological underpinnings in order to outline the case for Critical Realism as an approach that:

- offers us the perspective for appreciating the complexity of the issues under scrutiny and pave the path to interdisciplinary and transdisciplinary approaches;
- recommends case study method to conduct research which also considers contextual settings.

2.2.3 On interdisciplinary approaches and the validity of research outcomes

Besides the differentiation of reality in empirical, actual and deep domains (see above table 1) critical realists conceptualize reality as *stratified*, *emergent* and *transformational* (Danermark, 2002; Jessop, 2005). The concept of stratified reality refers to its composition of different strata often corresponding to research areas of different disciplines. For example, the social level is rooted in, but irreducible to the psychological, the biological and the chemical levels (Fleetwood, 2014). Moreover, the central point of the concept of emergence is that generative mechanisms do not operate solely within their level but also across the levels. They interact with each other activating or amplifying each other, or undermining the effects of other mechanisms (Dickens, 2003). As a consequence, neither a level of reality can be considered more foundational than others, nor a discipline can claim a supremacy over the others (Vandenberghe, 2014). In addition, social reality is also transformational, since agents reproduce but also transform pre-existing social structures. That is, the relationship

⁹ Furthermore, critical realism is able to avoid the incoherence and inconsistency of sceptical assumptions which, on the one hand, emphasizes the emancipatory role of knowledge and on the other hand points out the impossibility of knowledge (Hammersley, 2002).

between agency (intended as human agency) and structure should be studied recognising their interdependences and complex co-evolution. Human agency and social structure shape and redefine each other¹⁰.

An important implication of this ontology concerns the appropriateness and necessity of interdisciplinary or transdisciplinary approaches, in order to come closer to a valid knowledge¹¹. The integration of theoretical frameworks, concepts and research findings from different fields of research is necessary to uncover the intertwined causal mechanisms from different strata, resulting in observable phenomena. For instance, environmental psychological research has offered important insights and has triggered relevant development in environmental planning and policy domains (see for example Gifford and Nilsson, 2014). Furthermore, Dickens (2003) puts special emphasis on the need of relaxing the boundaries between lay and expert knowledge. Notwithstanding, the integration of knowledge from different disciplines and the integration of expert and non-expert expertise (e.g. traditional knowledge) involves challenges that deserve a closer examination.

Since the 1960s the incommensurability of paradigms, such as positivism and social constructivism, has been widely discussed by scholars; a debate that has been reinvigorated by the solution-oriented agenda of sustainability science¹², starting from the 1990s (Lang *et al.*, 2012). Opposite perspectives on the ontological and epistemological dimensions are the cause of their inconciliability. On this point, Danermark (2002) suggests that a weak social constructionist perspective is more

¹⁰ See Jessop (2005) for a review on the attempts of critical realists to address the agency-structure relationship.

¹¹ We intend here interdisciplinary research as the combination of knowledges from different disciplines that can provide us with new explanatory models and can generate new approaches and methods as well as new areas of knowledge (Danermark, 2002). We understand transdisciplinary research as an interface practice aiming at integrating various scientific and societal bodies of knowledge (e.g. scientific and lay knowledges) (Lang *et al.*, 2012).

¹² In the sustainability science domain, the transdisciplinary approach draws on the paradigm of post-normal science (Funtowicz and Ravetz, 1993), and is underpinned both by i) the value-laden concept of sustainability and ii) the discourses on the urgency in confronting the complexity of the world in order to tackle the causes of intertwined global crises. Pragmatic stances highlight the ineffectiveness of conventional policy-making and environmental planning. These arguments call for a co-production of knowledge through approaches that span the science-policy-society interfaces, enhance social legitimacy and capacity building (Popa *et al.*, 2015). Supplementary arguments lays on ethical stances aiming at integrating and reconciling the multiplicity of values and perspectives.

fruitful in order to build the premises for an interdisciplinary research. This perspective, as presented above, acknowledges that there is no neutral access to the reality; this, however, exists independently of us (Sayer, 2000). Consequently, the adoption of a reflexive attitude, besides avoiding a poor quality research results, allows to uncover the premises for articulating mutually compatible theories and integrating different disciplines and perspectives.

At this point, we must address scientific validity, a particularly relevant issue when research aims to inform policy-making. Are research findings sufficiently rigorous/trustworthy that we can act on their implications? Within Critical Realism various approaches coexist (Guba and Lincoln, 2005; Danermark *et al.*, 2002). Some adopt a foundational perspective; others highlight the relevance of public debate as the ultimate test for validity (see table 2.2).

Foundational perspectives	Refer to fundamental standards by which knowledge is validated	<ul style="list-style-type: none"> • Foundational knowledge is located in an external reality • The foundation of truth is located in historical-social infrastructure (critical theory)
Non-foundational and anti-foundational perspectives	Refuse to adopt an universal ultimate criteria by which knowledge can be universally validate	<ul style="list-style-type: none"> • Agreements about truth are subject to community negotiation and dialogue • The ultimate test of validity is the public debate (constructivist approaches)

Table 2.2 - Foundational and antifoundational perspectives. Source: adapted from Guba and Lincoln (2005)

To this effect, critical realists conceptualized and adopted different criteria to address the validity of research outcomes (see table 2.3).

<i>Judgemental rationality</i>	Interpretations and claims about reality shall be tested against empirical evidence and by comparatively evaluating arguments with competing ones (Archer <i>et al.</i> , 1998)
<i>Practical adequacy</i>	<p>The practical implications of knowledge and theory is the ground on which research outcomes are tested (Sayer, 1992)</p> <p>It calls for interactions among theory, reality and action</p> <p>The adequacy depends on contextual settings</p>

Table 2.3 - Criteria applied to address the validity of research outcomes

Note that the general point in common of these different approaches is that epistemic plurality does not equate to relativism, that is it doesn't imply judgemental relativity. In other words, it is always possible to distinguish among more and less credible knowledge claims, still acknowledging their contingency.

Furthermore, as pointed out by Huckle and Martin (2014), Critical Realism underpins post-normal science, which seeks plurality of often competing but legitimate perspectives (Funtowicz and Ravetz, 1993). Post normal approach focuses on situations characterized by high level of uncertainties, a plurality of values and time pressure for the design of problem-solving strategies. To address these challenges, it encourages the co-creation of knowledge (from expert and traditional domains) and its validation by an extended peer-community (Ainscough *et al.*, 2018). Thus, the legitimacy of any position becomes a matter of public debate. Embracing a more foundational perspective, we share the concerns expressed by Næss (2015) on the problematic regarding the viewpoint implying that the validity of research claims can be determined by its popular acceptance. He calls the attention to the following point: *"truth relativism may legitimate a devaluation of research-based knowledge through disinformation by powerful interest groups"* (Næss, 2015: 1238). This points out the necessity of taking in consideration asymmetric power relations.

2.2.4 Researching reality: the use of the case study

Critical Realism is compatible with a wide range of research methods and does not impose any of them. However, as a consequence of the ontological tenets outlined above (see figure 2.1), intensive qualitative methods are privileged since quantitative approaches are considered to have limited explanatory power (Sayer, 2000; Easton, 2010). The use of quantitative methods is preferred when in combination with qualitative methods (Næss, 2015) (see figure 2.1).

Scholars who have applied, refined and extended the principles of Critical Realism suggest a multi-method approach in order to mitigate unavoidable obstacles when accessing an "independent" reality. However, data collection and analysis from multiple sources must be reinforced by methodological triangulation. The latter seeks

to enhance the explanation while reducing the biases that may influence the researcher's interpretation (Wynn and Williams, 2012).

Notwithstanding the aforementioned, in order to proficiently explore contextual settings and uncover the interdependency of multi-causal mechanisms, the choice of a case study-based research is preferred (Easton, 2010). Its flexibility enables an iterative refinement of the research questions, and a "*continuous moving back and forth between the diverse stages of the research project*" (Verschuren, 2003: 132). This flexibility is of critical importance for retrodution, a meta-process that consists in "arguing backwards".¹³

Furthermore, a cross-case study analysis is privileged in order to discover what are usually referred as demi-regularities (Jessop, 2005). Causal associations are rarely universal, especially in open systems. However, patterns of events may be identified thank to a multiple case study approach, through which patterns of occurrence are traced back to a similar configuration of settings and causal mechanisms.

2.3 A critical realist agenda for research on nature conservation policies

In the specific context of this research, Critical Realism frames an inquiry into the main drivers, and their interactions, that underpin the emergence of Private Protected Areas (PPAs) as institutional models within nature conservation policies. Even acknowledging the fallibility of predictions, it admits the possibility of putting forth qualitative assessments about the consequences and impacts of their implementation as policy instruments. In particular, it also considers reasonable the possibility of predictions about the direction and relative strength of outcomes resulting from the implementation of a policy tool (Næss, 2015).

This is especially relevant for research in public policy. In this domain, the uncertainties of the complex policy-making process and resulting unintended outcomes, require an iteratively and constant impact assessment (Næss, 2015). Furthermore,

¹³ In detail, retrodution is a form of inference that aims at individuating what generated a given phenomenon. Its adoption implies an iterative process that is not completely deductive nor inductive.

dealing with the study of policy tools that are implemented in socio-ecological systems with problem solving objectives, requires the use of interdisciplinary approaches (i.e for the study of socio-ecological systems). These are not only accommodated but also recommended from a Critical Realism standpoint.

In sum, Critical Realism offers a meta-theoretical reference to undertake the two phases of our inquiry, the explanatory and the assessment one, substantiated in two distinct but intertwined research lines (see section 2.4).

The explanatory research line attempts to challenge the dominant social constructions with respect to the design and implementation of solutions for environmental degradation and nature preservation exploring the main driving forces of the emergence of a specific governance and institutional model for Protected Areas (PAs). In turn, the second research line aims to assess the social and environmental outcomes of the implementation of PPAs arrangements, trying to discern their potential interrelations. It especially aims at informing policy makers on the design of PPAs models that reduce their pitfalls. The articulation of the explanatory critique with the investigation on PPAs impacts encompasses an emancipatory intent, questioning the suitability of the current PPAs' institutional models.

2.4 Designing the study: two research lines

As outlined in chapter 1 this study is developed throughout two research lines with specific research questions and sub-questions that emerged throughout the research process and have structured the overall study design. Next, we i) list the research questions defining the “explorative map” of the study through which the main aims and specific objectives are developed, introduce ii) key methodological choices and iii) structure of the dissertation.

2.4.1 Research line A: the emergence of private protected areas

In Portugal, private protected areas (PPAs) were recognized by the 1993-legislative framework for conserved areas, as a distinct governance model along with

national protected areas managed by the central state authority and local and regional protected areas created and managed by local authorities (i.e. municipalities). PPAs' unique features include: i) the voluntariness of its creation, not designated through a hierarchical regulatory approach by state actors, and ii) the leading role of a private actor (whether an NGO, an individual landowner or a market actor), both in the proposal for recognition and management of the site. Both aspects are ground-breaking in the policy toolbox for nature conservation in Portugal.

In 2010, Faia Brava, a protected site in northern Portugal owned and managed by an environmental NGO, was integrated in the national network of protected areas with the designation of private protected area. This was our departing point, and the implicit system change our focal point of inquiry.

The first set of research questions arises from the novelty of the governance model of PPAs in relation to the more diffused state-managed protected areas. Thus, the first research line aims to shed light and better understanding of the dynamics of change in the domain of public policies for nature conservation. In particular, we focus on the emergence of PPAs among other governance arrangements for protected areas' creation and management.

PPAs emergence seems to be emblematic of a more overarching change that the field of nature conservation policies has undergone during the last decades (Paavola *et al.*, 2009). This change which has followed different paths according to country and policy field is, in the literature, usually referred as governance shift or governance turn (Rhodes, 1997; Pierre and Peters, 2000).

As mentioned above, few empirical studies have been devoted to the diffusion of PPAs as a new and complementary governance models for PAs, especially in Europe. This research addresses this gap. To this effect, Research line A inquiries on:

- Research Question 1: *What are the features of PPAs institutional models in EU countries?*
- Research Question 2: *How and why did PPAs emerge as a complementary institutional model for protected areas management in Portugal?*

Research Question 1. *What are the features of PPAs institutional models in EU countries?*

This query has a descriptive purpose, the portrayal of the key characteristics of the object of our inquiry. This also entails a proposed definition of PPAs that will be adopted in the successive parts of the study.

The rationale underpinning its elaboration as preliminary step deals with a gap identified in the body of knowledge. A review of the academic literature and international policy documents (see chapter 3) has shown that the research on PPAs diffusion and the debate on their potential and pitfalls are largely based on Anglo-Saxon (e.g. U.S., Australia and South Africa) and South American countries (e.g. Chile and Brazil). Few studies have so far focused on Europe.

A focus on European Union (EU) member-states will allow to explore PPAs characteristics in countries where nature conservation policies are embedded in multilevel governance arrangements which, besides sub-national, national and global/international levels, encompass the Europeanization of decision-making. Indeed, the E.U. plays a fundamental role in shaping national environmental law regimes and environmental policies, specifically, among others, nature conservation policies (e.g. the E.U. Natura 2000 network).

Research question 2. *How and why did PPAs emerge as a complementary institutional model for Protected Areas in Portugal?* While the first research question has a descriptive aim, the core objective of the second one is more explanatory, since it seeks to uncover and unpack the different drivers and enabling factors explaining the emergence of PPAs. The research is focused on the Portuguese case. The relevance of the Portuguese experience, its value as case study, springs from the fact that PAs governance rescaling and, particularly, the recognition of PPA as a distinct institutional model for PAs, clearly challenges the Portuguese centralist top-down administrative tradition.

The second research question is developed and articulated in a sub-set of research questions, in light of: i) a global trend of non-state actors (private actors and local authorities) involvement in the governance of Protected Areas (Dearden *et al.*,

2005); ii) public policy tools not drawing on command-and-control legislation, also labelled “new” environmental policy instruments, may actually be rather “old” ones (see Jordan *et al.*, 2013), our interest firstly focuses on the following questions:

Research Question 2.1: *How did the involvement of non-state actors in Protected Areas governance occur in Portugal?*

Research Question 2.2: *Are current PPAs institutional arrangements “new” models in the Portuguese jurisdiction?*

To attempt an answer, we must engage a diachronic approach essential to address the *how* and *why* queries regarding PPAs emergence. A broader perspective is required to situate the development of PPAs and disentangle the factors that have contributed to their materialization as policy tools. Subsequently, we must ask:

Research Question 2.3: *How and to what extent did the multilevel governance context influence the emergence of current institutional arrangements for PPAs in Portugal?*

Noteworthy, the influence of the multilevel governance context is the entry point to shed light on other intertwined factors that concur in explaining PPAs emergence as policy tools. The presence/absence of identified causal mechanisms and their interactions is expected to define the peculiarity of the Portuguese case.

Table 2.4 provides an overview of the main aims of each research questions, breaking them down in single tasks/objectives. It also presents the methods adopted to address the research queries. A brief indication of conceptual and theoretical frameworks structuring data analysis is also given. More details on methods used for data collection and analysis, as well as on strategies adopted to minimize bias and methods limitations, are provided within each chapter (chapter 3, chapter 5).

Research line A			
Research Question 1 <i>What are the features of PPAs institutional models in EU countries?</i>			
AIMS	OBJECTIVES	METHODS	CONCEPTUAL FRAMEWORK
<ul style="list-style-type: none"> Characterizing PPAs institutional models in EU countries Proposing a definition of PPAs based on their institutional model 	<ul style="list-style-type: none"> Identifying which EU countries have already recognized PPAs as a distinct governance category for PAs Analysing state actors and non-state actor's role and interplays in PPAs models Identifying similarities and differences between models 	<ul style="list-style-type: none"> Cross-case analysis of PPAs institutional models <i>For each case study:</i> Literature review (academic and grey literature) Collection and analysis of data from the CDDA* Collection and qualitative analysis of policy and legal frameworks for PPAs 	Conceptual framework built bridging literature on governance shift in public policies, Public Private Partnerships and PPAs
Research Question 2 <i>How and why did PPAs emerge as a complementary institutional model for protected areas in Portugal?</i> R.Q. 2.1 <i>How did the involvement of non-state actors in Protected Areas governance occur in Portugal?</i> R.Q. 2.2 <i>Are current PPAs institutional arrangements “new” models in the Portuguese jurisdiction?</i> R.Q. 2.3 <i>How and to what extent did the multilevel governance context influence the emergence of institutional arrangements for PPAs in Portugal?</i>			
AIMS	OBJECTIVES	METHODS	CONCEPTUAL FRAMEWORK
Identifying the main drivers and enabling factors explaining the emergence of PPAs as institutional models for PAs	<ul style="list-style-type: none"> Contextualizing PPAs emergence within changes in PAs governance (R.Q 2.1) A diachronic analysis to describe the emergence and change over time of PPAs institutional models (R.Q. 2.2) Identifying the drivers explaining PPAs emergence (R.Q 2.3) 	<ul style="list-style-type: none"> <i>Case study approach</i> (combining two scale of analysis: the national scale and PPAs practices) Literature review Collection and qualitative analysis of policy and legal frameworks for nature conservation Semi-structured interviews 	<ul style="list-style-type: none"> Theoretical framework bridging literature on governance shift in public policies and on PAs governance Analytical framework adapted from Niedzialkowski <i>et al.</i> (2016)

Table 2.4 Research line A

Notes: *CDDA: Common Database on Designated Areas

2.4.2 Research line B: assessing the social and ecological fit

A second research line arises from the academic debate on the impacts and the implications of the diffusion co-governance models, in particular of public-private partnerships, against the backdrop of the governance turn. This debate is reflected in the increasing scholarly interest in shedding light and discussing potentialities and pitfalls of co-governance arrangements in nature conservation policy (e.g. who benefit from the change?).

Therefore, the concern of the research line B is twofold. Firstly, it focuses on *how* to assess the suitability of current institutional setting of PPAs considering their nature conservation objectives. Successively, the task is to undertake the assessment and discuss current impacts and future potential consequences of PPAs implementation, applying the proposed theoretical and conceptual lenses. Specifically, to address these research issues we consider the specific features of PPAs as policy instruments, in particular the fact that they operate in open socio-ecological systems. Consequently, we underline the relevance of acknowledging the interdependencies between complex human and ecological dynamics. In order to operationalize this interdisciplinary concern, we drawn on the concept of institutional fit in socio-ecological systems, in particular on the concepts of social fit and ecological fit. Accordingly, the research line B encompasses the following research questions:

Research Question 3.1: *To what extent are current Portuguese PPAs institutional settings able to address social fit and ecological fit?*

Research Question 3.2: *Under which conditions are current Portuguese PPAs institutional settings able to address social fit and ecological fit?*

As shown by table 2.5, a case study approach is conducted in order to test the proposed analytical framework to assess the suitability of current PPAs institutional settings for nature conservation and to build hypotheses on the conditions that enable their suitability. The case study selected is the natural reserve of Faia Brava which is the only PPA currently integrated in the Portuguese network of protected areas. Details on methodological choices, and on the strategies employed to address their challenges and limitations, will be presented in Chapter 7 and Chapter 8.

Research line B			
Research Question 3.1 <i>To what extent are current Portuguese PPAs institutional settings able to address social fit and ecological fit?</i>			
Research Question 3.2 <i>Under which conditions are current Portuguese PPAs institutional settings able to address social fit and ecological fit?</i>			
AIMS	OBJECTIVES	METHODS	CONCEPTUAL FRAMEWORK
Assessing the social and ecological fit of PPAs institutional settings	<ul style="list-style-type: none"> Proposing an interdisciplinary framework to assess the suitability of PPAs institutional settings for nature conservation Assessing PPAs social and ecological fit Identifying contextual factors that enable PPAs fit 	<i>Case study approach</i> <ul style="list-style-type: none"> Literature review Document analysis Semi-structured interviews Observation 	Theoretical framework on institutional fit (social and ecological fit) in socio-ecological systems

Table 2.5 - Research line B

2.4.3 Conceptual outline

The two research lines may be considered separately, each with its own aims, objectives and research outcomes. Research line A has a descriptive and explanatory aim while Research line B adopts a normative standpoint and aims to propose a framework to assess the institutional model of PPAs and contextually analyses and discusses its strengths and weaknesses in view of their nature conservation objectives. In other words, the second part of the dissertation (Research line B) is policy-oriented.

However, we should emphasize that it draws on the contextualization provided by the initial part of the study (Research line A) which provides a description of PPAs features and explanation of their emergence. The latter is propaedeutic to better interpret the implications of the implementation of PPAs institutional settings. In light of the fundamental traits of the critical realist approach presented and problematized above, we claim that the analysis of causal mechanisms that produce the emergence of

PPAs enable a better-informed discussion about the resulting suitability of their institutional arrangements.

The way research lines and research questions articulate between them and throughout the dissertation is presented in figure 2.2 that illustrates the conceptual outline of the dissertation.

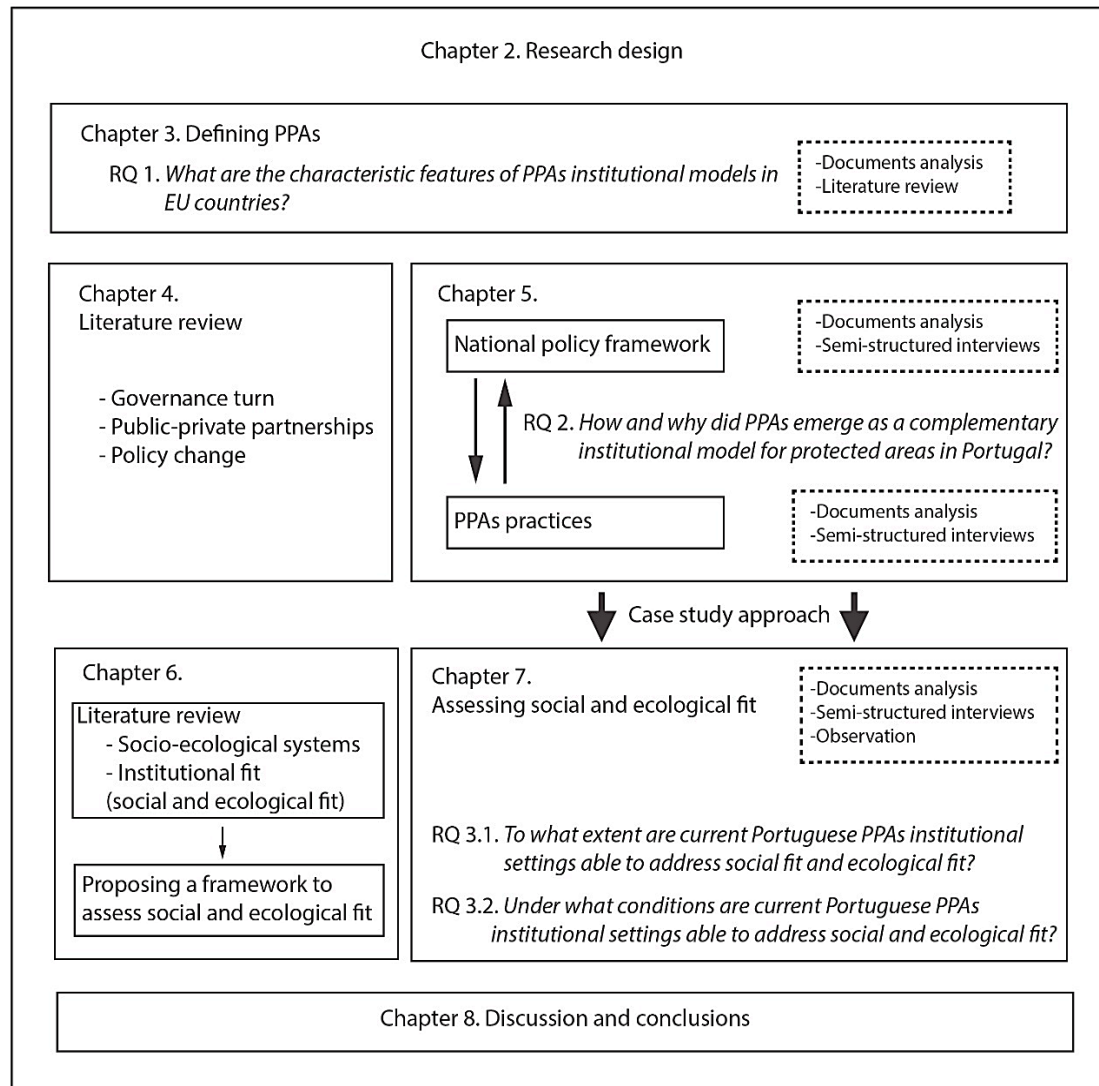


Figure 2.2 – Conceptual Outline

2.5 Concluding remarks

The main methodological choices are summarized using the diagram of the research process onion, developed by Saunders *et al.* (2016: 104). As shown in figure 2.3, the first layer is the research philosophy presented in the first part of this chapter; the meta-theoretical approach of Critical Realism is our departing point that defines the boundaries of the inner layers. The research approach is a mixed orientation between an inductive and a deductive approach.

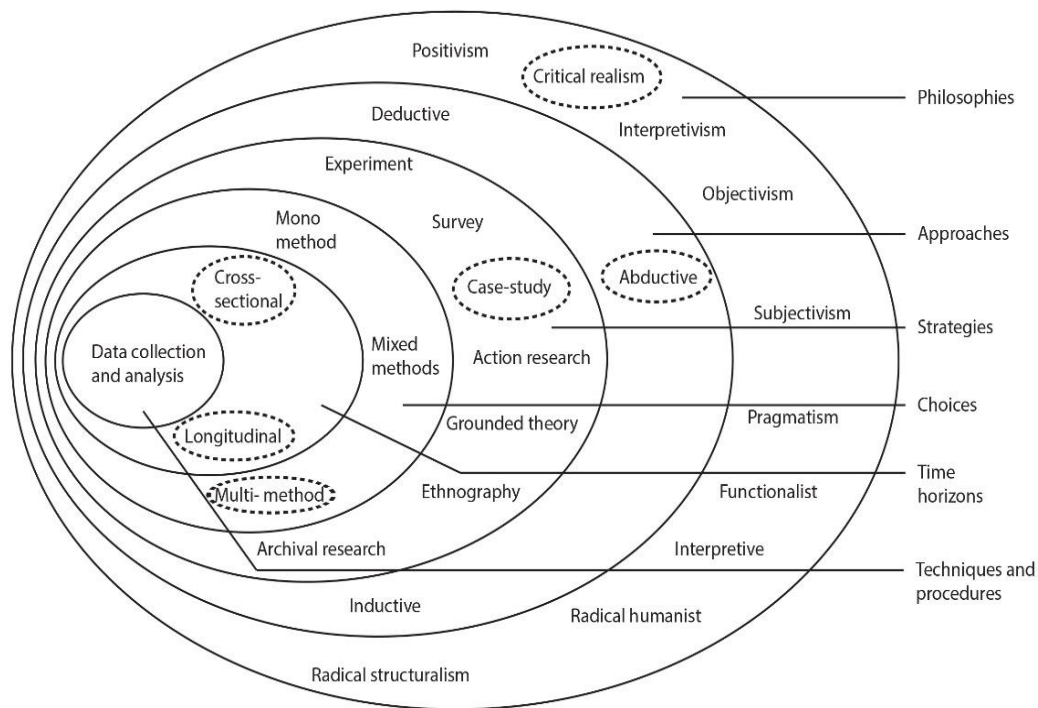


Figure 2.3 - The research onion. Source: adapted from Saunders *et al.* (2016)

Moreover, we adopt the case study strategy/approach. Specifically, while Research Question 1 is addressed through a cross-case study analysis of institutional arrangements for PPAs in EU countries, Research Question 2 (with its sub-questions) and Research Questions 3.1 and 3.2 adopt a single case study approach, being respectively Portugal and the Faia Brava natural reserve the focus of the research.

Different qualitative methods are combined for data gathering and data analysis procedures, we thus apply a multiple method qualitative design. In particular, in order to address the Research Question 2 (with its sub-questions) and the Research Questions

3.1 and 3.2, desk study, through collection of policy and legislative documents, is complemented with semi-structured interviews, the use of secondary data and observation (as regards Research Question 3.2).

Finally, as concerns the time horizon over which the research is undertaken, a distinction is required. The descriptive purpose of the first query (Research Question 1) is associated with a cross-sectional time horizon. Research Questions 2 necessitates data to be collected for an extended period of time to study the changes of PAs governance and nature conservations policies in Portugal since the designation of the first natural Parks in the 1970s. As regards, the Research Questions 3.1 and 3.2, while benefitting from a diachronic approach for the contextualization of the case-study, they are addressed with a “snapshot” approach, that is using a cross sectional time horizon.

CHAPTER 3. THE HETEROGENEOUS LANDSCAPE OF PRIVATE PROTECTED AREAS

3.1 Introduction

Private Protected Areas (PPAs) have gained attention among scholars in recent years, reflecting their increasing role in global nature conservation efforts and the growing support they are receiving as promising approaches for conservation policies. The number of PPAs, the area covered and their geographic reach have dramatically expanded over the last decades (WDPA¹⁴, Stolton *et al.*, 2014; Langholz, 2010; Langholz and Krug, 2004).

Concurrently, PPAs support and their integration in protected areas' systems have been strongly promoted by the World Commission on Protected Areas of the International Union for Conservation of Nature (IUCN-WCPA) as promising alternative mechanisms to help achieving global targets (e.g. the Aichi Target 11 of the Convention on Biological Diversity - CBD)¹⁵. Projected towards the post-2020 agenda the IUCN published in 2018 guidelines of good practices for PPAs' creation and management (Mitchell *et al.*, 2018)¹⁶.

Further, the CBD itself has recently stressed the relevance of PPAs' contribution and encouraged state members to adopt policies for the recognition of existing PPAs¹⁷ and for supporting the establishment of new ones. The European Commission is also starting moving in the same direction, as demonstrated by the report "Alternative ways

¹⁴ World Database on Protected Areas (<https://www.protectedplanet.net>), managed by the United Nations Environment World Conservation Monitoring Centre with the International Union for Conservation of Nature (IUCN).

¹⁵ See above, note 3 chapter 1.

¹⁶ Previously, the recognition and diffusion of PPAs as a policy tool was encouraged through the adoption of the "Private Protected Area Action Plan" by the IUCN Fifth World Parks Congress in Durban in 2003, and, more significantly, by the 2004 "Programme of Work on Protected Areas" of the CBD that supported the designation of multiple PAs' governance types (Langholz, 2010).

¹⁷ UNEP/CBD/COP/DEC/XII/19.

to support private land conservation” (Disselhoff, 2015). The study explores a variety of tools for conservation on privately owned land, with a still limited application in the European Union (E.U.), with a special focus given to inspiring PPAs practices.

Another salient illustration of PPAs momentum in the international arena is the growing community engaged in transnational civil society organizations such as the International Land Conservation Network and the European Private Land Conservation Network. This proactive international context is also reflected at national level where PPAs have been recognized in a growing number of national conservation strategies, and recently appeared in national biodiversity strategies and action plans (Mitchell *et al.*, 2018).

Given their significant and rapid proliferation around the world and their strong promotion as policy tools, it is surprising to find that so little research has explored policy and institutional mechanisms that support their creation, and analysed PPAs institutional settings. Recent efforts to systematize distinct legal mechanisms and policy approaches, have focused on those countries where conservation on private lands by private landowners and land trusts began relatively early and/or is nowadays well established (Capano *et al.*, 2019). Instead, research on PPAs is still relatively neglected in Europe where the establishment of PPAs systems is a relatively recent but slowly emerging phenomenon. Here state-run protected areas have been a traditional focus of study as the most common governance typology (Holmes, 2013) whose data is comparatively easier to access.

The aim of this chapter is to depict the object of our inquiry. For this purpose, the review of the literature on PPAs will be complemented with an analysis of PPAs’ institutional models in four European countries. Particularly, we aim to address the gap between PPAs diffusion as nature conservation strategies in Europe and the limited empirical studies and academic debate on their institutional arrangements. In particular, the first research question will be here address: *What are the features of PPAs institutional models in European countries?*

In what follows an overview of the distinct approaches for conservation on private land will be provided. The inventory is not meant to be exhaustive; rather it aims

to offer a background useful to outline the peculiar characteristics of PPAs, as defined mainly drawing on IUCN definition. Then a synthesis of the key findings of the literature on PPAs will give an overall picture of PPAs phenomenon worldwide and outline the main debates around them. Zooming in, the focus will then shift on PPAs in four European countries. Drawing on the findings of the comparative study we propose a definition of PPAs as public-private partnerships and a descriptive framework that is meant to contribute to a more systematic analysis on PPAs institutional models.

3.2 Going voluntary! Approaches for nature conservation on private land

Each country's historical, institutional and socio-economic contexts have shaped the way private landowners have proactively participated and/or have been involved in nature conservation efforts. As a result, a broad array of approaches for conservation on private land have emerged worldwide. In order to disentangle the wide range of mechanisms, it is useful to trace a continuum ranging from non-voluntary to voluntary approaches, defined considering the landowner viewpoint¹⁸ (see Kamal *et al.*, 2015).

At one extreme, involuntary approaches encompass i) compulsory acquisition of land by the government, ii) compulsory relocation of people and iii) the imposition of restrictions and regulations on land use and natural resources use (Kamal *et al.*, 2015). These approaches, often combined, constituted the cornerstone of the early nature conservation strategies aiming at creating national systems of Protected Areas (PAs). They are still applied worldwide, the more exclusionary cases being documented in the Global South (Brockington and Igoe, 2006; Lunsrum and Ybarra, 2018). However, the past decades have witnessed a paradigm shift towards a growing involvement of stakeholders in decision-making processes for the establishment and management of PAs (Jeanrenaud, 2002) (see chapter 4). Also, distinct forms of compensation payments have been designed; a good illustration are agro-environmental schemes in the framework of the EU Common Agricultural Policy applying to farmers in Natura 2000 sites.

¹⁸ Distinct taxonomies can be found in the literature, based on other criteria, such as the nature of the incentives (e.g. economic, moral) and the type of landowner or land-management activity targeted.

Mixed strategies that combine top-down prescriptions with voluntary approaches include biodiversity-offsetting schemes aiming to compensate unavoidable residual damages to the environment resulting from infrastructure development projects. They rely on markets (e.g. biodiversity banking) where developers can buy credits that offset biodiversity loss from landowners that voluntarily decide to produce biodiversity benefits (Koh *et al.*, 2019). These schemes are increasingly required by policy and legislative frameworks (e.g. the U.S. mitigation banking) and by global financial institutions.

Voluntary strategies stand at the opposite side of the continuum. In these cases, the landowner decides to limit human activities negatively impacting nature, and eventually implement active measures to promote nature preservation and/or restoration. That is, the initiative comes from the landowner and it is not a consequence of statutory duties (Disselhoff, 2015). Even when a public programme is implemented to support and promote conservation measures the decision of participating lies with the landowner. Powerful arguments for their use as flexible policy tools call upon their higher social acceptability, compared to the coercive means of “command and control” tools¹⁹, and their relatively limited impact in public resources.

The wide array of voluntary approaches existing worldwide can be broadly distinguished between those that have legal status and entail *de jure* binding obligations for the landowner and those that have a *de facto* establishment without binding requirements (see Kamal *et al.*, 2015). Legal tools encompass conservation easements, conservation leases, land stewardship contracts and safe harbour agreements. Each of them presents a large variability, as regards the actors involved, the incentives used and the permanence of protection (see table 3.1).

¹⁹ See Schoukens, 2015.

Legal tools		Permanence	Practices
Conservation easements/ covenants	Binding agreements entered in a voluntary basis, between a grantee (e.g. land trust, public agency) and landowner which create a restriction on the use of the subject property in return for compensation (e.g. tax benefits or the sale of developmental rights)	Usually binding for future owners (registered in the land title)	Well-established practices in the U.S. (Korngold, 2010) and Australia Scarse use in the E.U. (Račinska and Vahtrus, 2018)
Conservation leases	Mainly used by to gain use and management rights on the land selected for its high natural values	Variable duration	Used by conservation organizations
Land stewardship agreements	Involving a landowner (or a land-manager) and a land stewardship organization establish the landowner's commitment to conservation-oriented actions or the transfer of the land management to the organization They can take the form of a handshake deal (contract of verbal nature)	Variable duration	They are gaining momentum in Spain (<i>custodia del territorio</i>) (Basora and Sabaté, 2006)
Safe harbour agreements	The landowner commits itself to the restoration and management of habitats for endangered species on its property. In return, he is granted that no additional restriction will be imposed	Variable duration	They have emerged in the United States to reduce perverse incentives caused by the imposition of conservation rules (Schoukens, 2015)

Table 3.1 Legal tools for voluntary conservation on private land
Source: Disselhof (2015); ELI (2003)

The wide spectrum of voluntary options for nature conservation on private lands also include the establishment of private reserves recognised by national legislation. They are usually considered a stricter category of land protection than conservation easements (ELI, 2003).

One of the models that has attracted the interest of scholars and policy makers are the Brazilian Private Nature Heritage Reserves (*Reservas Particulares do Patrimônio Natural* - RPPN) voluntarily established and managed by the landowner as permanent conservation areas where the extraction of natural resources is prohibited (Ladle *et al.*, 2014). Instead, private reserves for game management are widespread in African countries, such as Namibia and South Africa (Krug, 2001). Remarkably, they may not be primarily dedicated to nature conservation.

Furthermore, among the wide variety of approaches that landowners can join on a voluntary basis it is relevant to mention the certifications schemes. They include criteria for biodiversity protection and are playing an increasing role in agriculture and forestry (Simonsson *et al.*, 2016).

Finally, voluntary strategies with no-binding nature include conservation programmes that landowners can join implementing relatively feasible and inexpensive actions²⁰. Other programmes are designed to offer technical support (Santangeli *et al.*, 2016). Also, landowners may initiate conservation actions setting up informal private reserve without legally binding commitment. Self-imposed restrictions usually occur because no mechanisms of recognition has been yet enacted at state or local level or because the landowner himself does not seek any strict obligations and control, or prefers not to engage in time-consuming bureaucratic processes (Clements *et al.*, 2016). In this regards, it is important to highlight that when the landowner is a conservation NGO holding accreditation, this indirectly gives a certain degree of recognition to the protected area²¹.

Voluntary approaches can also be arranged along a continuum having on one extreme those supportive of external motivations and involving economic market-based incentives (e.g. certifications), economic incentives based on public contract (e.g. agri environmental payments) or private legal tools (e.g. specific provision for conservation easements or payments for ecosystems services)- and to the other extreme those approaches that rely on and support internally motivated behaviours (e.g. conservation programmes) (Dedeuwaerdere *et al.*, 2016).

Agri-environmental payments and the funding for land purchase for conservation goals (e.g. through the EU Life Programme) are an example of public incentive programmes implemented in the EU payments for ecosystem services schemes used to provide payments to landowners actively engaged in conservation.

²⁰ Such as the placement of nest boxes and bird feeders.

²¹It is important to note that conservation NGOs may manage the purchased land for conservation purposes or opt to donate it to government agencies responsible for nature conservation (ELI, 2003; Pasquini *et al.*, 2011).

3.3 A broad definition for a wide variety of private protected areas

The heterogeneous landscape of approaches for nature conservation on private land provides a platform on which attempting to define the peculiar characteristics of PPAs. Are PPAs all the areas dedicated to conservation legally established on land with private ownership? Or do only voluntary approaches fall under PPA definition? Alternatively, are PPAs merely a type of private reserves?

In the literature different definitions can be found, mainly reflecting the large variety of jurisdictional and legislative frameworks under which PPAs are designated (Stolton *et al*, 2014) and the socio-economic contexts that underpin their establishment. Fitzsimons (2015), focusing on the Australian case, stresses that the term may also lack a clear definition within a single national policy framework. All this contribute to make generalizations problematic.

Furthermore, PPAs are also commonly referred as private reserves or privately protected areas. The adverb “privately” is preferred to highlight that, while they are established on private land, the benefits they provide are public (Mitchell *et al.*, 2018). Also, it emphasises that they do not necessarily entail exclusive access to the area (Gooden, 2018).

So far, the definition which has received the broadest consensus is the one developed by the IUCN. Although its application by countries is voluntary, it is likely to standardize the national classification systems in the long-run. Primarily, it aims to facilitate systematic analyses and data gathering. Due to the policy-oriented standpoint of this study, the definition of PPA used hereafter will draw on it.

According to the far reaching definition given by IUCN PPAs are “*clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values*” (Dudley, 2008: 8), “*under individual, cooperative, NGO or corporate control and/or ownership, and managed under not-profit or for-profit schemes(...)[where] the authority for managing the protected land and resources rests with the landowners, who determine the conservation objective, develop*

and enforce management plans and remain in charge of decisions, subject to applicable legislation” (Dudley, 2008: 26).

Accordingly, neither the private management of the area nor the decision on a voluntary basis to implement nature conservation actions are sufficient criteria to identify a PPA. First of all, in order to be considered a *protected* area the intent for long term *in situ* conservation is crucial. Second, an important criterion is that the area is managed having nature conservation as the primary objective. Third, and crucially, a PPA is an area under private governance²², meaning that the private actor holds all the decision-making power for the establishment and management of the protected area. This implies that also in those cases where, despite the public ownership of the land, the decision making power for its management is in the hand of a private actor, can fit IUCN definition. In details, private actors include individuals (or group of individuals), NGOs, corporations, for-profit entities, religious organizations and research institutions (see Stolton *et al.*, 2014).

It follows that not all the voluntary approaches outlined above fit on their own in the IUCN definition. Nonetheless, many of those conservation tools might be (and usually are) applied to PPAs’ establishment and management. Consequently, PPAs characteristics are dependent upon the legislative framework enacted to promote and regulate them and, more specifically, on legal and incentive mechanisms used to establish and manage them (see table 3.2).

Legal tools	Conservation easements, stewardship agreements, gazettment/private reserves designation, land purchase by conservation NGO
Financial resources	Tax incentives, land use grants, priority on other public funding or bank loans, payments for ecosystem services, offsetting schemes, private funding (e.g. NGO donors)

Table 3.2 Legal tools and incentives mechanisms for private protected areas

²² Private governance is one of the governance types distinguished by IUCN alongside public governance, indigenous governance and shared governance (Borrini-Feyerabend *et al.*, 2013).

Note that, as far as IUCN definition is applied, PPAs are not necessarily receiving official recognition by state, for instance through gazettment²³, inclusion in national systems of PAs or in targeted nature conservation strategies, or through conservation easements' recognition. Indeed, given the long-term conservation commitment as their main goal, they can be areas owned by an NGO with a "*legal structure that obligates conservation*" (Stolton *et al.*, 2014: 8) or bottom-up initiatives of private landowners who do not seek any formal recognition or face the absence of a policy framework. Many of the latter areas are recognized merely by conservation NGOs, PPAs associations or outside experts (e.g. WCPA chairs) (Chacon, 2005; Stolton *et al.*, 2014).

Notwithstanding, considering the (national scale) policy-oriented purpose of this research, within the broader ensemble of PPAs, I am training my attention on PPAs which are recognized by state actors. Still, this focus does not preclude analysing and discussing the relation with non-recognized PPAs. Indeed, exploring this link is crucial to shed light on institutional and contextual settings that favour or hinder PPAs diffusion as public policy mechanisms.

3.4 A literature review

3.4.1 Reviewing the spread of private protected areas

Studies have shown that PPAs²⁴ make a relevant contribution both at national and local scale in a growing number of countries: Carter *et al.* (2008) estimated that PPAs cover 13% of Tanzania, while in Klein Karoo region in South Africa they protect more land than state's conserved areas (Gallo *et al.*, 2009 *apud* Holmes, 2013). In Peru the 5,4% of the national network of protected areas is constituted by PPAs and in Costa-Rica PPAs protect at least 1,2% of the territory (Langholz, 1999).

Zooming out, it is worth noting that PPAs coverage and relative share on the total number of protected areas appear to be less significant at a global level. According to Holmes (2013) in 2012 PPAs covered 0,4% of the total area recorded in the World

²³ Recognition under statutory civil law.

²⁴ Note that different definitions of PPAs are applied.

Database on Protected Areas (WDPA). Nevertheless, we should consider that despite the improvements in the reporting in the WDPA, data on PPAs diffusion and coverage worldwide is still certainly underestimated (Bingham *et al.*, 2017). As mentioned above, gathering information on PPAs is hampered by the existence of multiple definitions that reveal the different forms that PPAs can take at national and local levels (Stolton *et al.*, 2014). For example, in Chile given the lack of an official definition, initiatives led by indigenous communities have been included in the counting of PPAs (Stolton *et al.*, 2014).

Furthermore, what is most striking is PPAs exponential increase in the last decades. As an illustration, in Brazil since 2005 PPAs number has increased by 35% (Pegas and Castley, 2016). In the UK, since 1990 the three larger conservation land trusts have expanded their land holdings by some 20%.

In addition, Langholz and Lassoie (2002) argue that the discussion on PPAs can not be based on the track of the area coverage alone; rather, it should also explore PPAs distribution amongst biomes, endangered habitats as well as their contribution for improving the functional connectivity across protected areas' networks. This is especially relevant when considering conservation response to cope with the impacts of climate change, which is already disrupting ecological relationships and species ranges (Stein *et al.*, 2014). In this respect, they point out that PPAs crucially serve as buffer zones and biological continuum for state-run protected areas. In this vein, a study conducted in South Africa has demonstrated that within a multi-tenure protected areas' system PPAs have the potential to significantly increase the diversity of protected species at regional scale (Clements *et al.*, 2018).

All in all, PPAs phenomenon appears to be one of the most important in current nature protection strategies worldwide and is expected to keep growing (Drescher and Brenner, 2018). Against this background, it is relevant to question: what do we know about PPAs emergence and their support by nature conservation policies?

PPAs historical roots date back to hunting reserves in medieval Europe and private aristocratic parks (Runte, 1979 *apud* Langholz, 2010)²⁵. Nevertheless, systems of PPAs are a more recent phenomenon. Land purchase for conservation was a key strategy to protect wildlife for conservation organizations²⁶ in the UK in the 19th century and first half of the 20th century (Adams *et al.*, 2014). In the USA, which has the world largest private reserve system, the earliest land trust (the Trustees of Reservations) has operated continuously since 1891 (Bernstein and Mitchell, 2009). Almost 60 years ago PPAs were discussed at the first IUCN World Congress on National Parks, in 1962 (Langholz and Lassoie, 2002).

The global ecotourism boom was believed to be one of the leading factors driving the increase of PPAs in Africa and in Latin America starting from the 1980s. In particular the quest for pristine environments and the experience of charismatic megafauna, as well as the expansion of markets for wildlife products, have been crucial to make ecotourism a financially competitive use of land (Pegas and Castley, 2016; Jones *et al.*, 2005) stimulating landowners to set aside land for sustainable income-generating activities. However, further evidence has revealed that in Brazil, a country rich in biodiversity hotspots and natural attractions, not all PPAs are directly engaged in tourism activities, thus suggesting other catalysts of PPAs expansion (see Slovak, 2017).

In the 1990s, Australia and some South American countries were pioneers in the enactment of legal frameworks for PPAs' recognition and support (Langholz, 2010). In particular, in Costa Rica and Paraguay PPAs' formalization and recognition have been found to be key drivers for PPAs spreading. This occurs thanks to the strengthen of landowners' tenure especially when governments provide assistance in case of squatter invasion (Langholz 1999; 2010). Similarly, Rambaldi *et al.* 2005, mention cases in which PPA creation with statutory recognition enabled landowners to prohibit hunting on their property. Interestingly, other studies record cases in which landowners have been prompt by negative incentives in order to retain their property and anticipate more

²⁵ However, as noted by Geisler and Daneker (2000), in this case the distinction between private and public property may be inappropriate since the wealthy elite owner of the early private reserves may be associated with state structure.

²⁶ An example is the Royal Society for Conservation of Birds.

stringent regulation, land reforms or expropriation for tourist development (Buckley and Pegas, 2015; Stolton *et al.*, 2014).

In countries where state recognition was coupled with targeted public programmes, financial incentives, such as tax deductions or payments for ecosystems services schemes, and other benefits (e.g. technical support and priority on bank loans), have been crucial to trigger the proliferation of PPAs (e.g. in U.S and Australia) (Selinske *et al.* 2015 ; Merenlender *et al.*, 2004). On this point, it is important to note that financial and technical support to individual landowners may be also given by big conservation NGOs ²⁷ which often also play a relevant role as networks facilitators (Pegas and Castley, 2016; ELI, 2003).

As an illustration, Brazil's Private Reserves of Natural Heritage (RPPNs, see above) have received considerable attention by scholars due to their rapid expansion mainly driven by a robust policy and legislative framework. Drawing on precedent forms of protection on private land, RPPNs were established by federal decree of 1990 and recognized in 2000 as official conservation units, integrated within the National System of protected areas. Successively, the designation process was decentralised at state and municipal levels (Slovak, 2017; Pegas and Castley, 2016; Rambaldi *et al.*, 2005).

As regards the role played by financial incentives, it is worth considering that Pasquini *et al.*'s (2011) survey found that motives behind the pro-environmental behaviours of PPAs owners in South Africa were more value-driven than incentive-based. In this line, a recent study exploring what individual landowners engaged in private land conservation have in common, across a different cultural and policy contexts, highlights the significance of a meaningful personal engagement in a project (Gooden, 2018). Further evidence has demonstrated that landowners may be also motivated to commence nature conservation activities on their land by their public responsibility to deliver a common good (Carruthers, 2008).

However, research on motivations for PPAs set up is still in its early stage; suggested future research lines include exploring difference of motives among distinct

²⁷ For example the World Wide Fund for Nature (WWF) and the Nature Conservancy (TNC).

groups of PPAs owners and/or managers encompassing individual landowners²⁸, corporations and NGOs (Pegas and Castley, 2016). In particular, there is an increasing number of companies and corporations which create PPAs as part of their corporate social responsibility strategy, to compensate the negative environmental impacts of their activities, and thus improve their image as sustainable business actors (Stolton *et al.*, 2014). Instead, the topic of motivation is particularly contested as regards NGOs. While they refer nature protection as their primary mission, their agenda might also be defined by corporations or they might be purposefully created by company to run their projects.

3.4.2 The triple-win discourse versus the neoliberal conservation critique

Debate on PPAs performance seems to have polarized around two contrasting positions. PPAs advocates emphasize multiple PPAs' features that are claimed to make them more socially just and more effective in meeting conservation purposes than other protected areas. A "triple win" discourse celebrates PPAs ability to simultaneously deliver i) a more socially just alternative to coercive approaches which eventually empower local communities; ii) effective nature conservation and iii) a reduction of public resources allocated to PAs establishment and management. In particular, being voluntary approaches property rights are not called into question, or are voluntarily reallocated. For this reason they are expected to reduce opposition by local communities usually caused by top-down approaches (Langholz and Lassoie, 2002; Krug, 2001).

Moreover, flexible management structures and private actors capacity in capturing the economic values of biodiversity and in fundraising are praised as crucial potentialities (Cooke *et al.*, 2011; Langholz and Lassoie, 2002; Krug, 2001). However, it is relevant to highlight that the few studies conducted so far show that PPAs management effectiveness does not differ substantially from that of public protected areas (Stolton *et al.*, 2014). Nonetheless, this evidence does not weaken the prevailing arguments for PPAs use as a policy tools which call upon political constraints and the

²⁸ For a discussion on the role and motives of philanthropists, see Holmes, 2012.

shrinking of public funds directed to the creation and maintenance of additional state-run natural reserves (Langholz and Lassoie, 2001). When concerns over PPAs' financial sustainability arise, e.g. in those cases where they are funded exclusively by fluctuating ecotourism business, their formalization and the development of enabling policies is highly recommended (Sims-Castley *et al.*, 2005).

On the other hand, a growing and diverse body of literature has pointed out that the label of innovative and alternative instruments overshadows PPAs' vocation in perpetuating pre-existing unequal power distribution and accentuating (or creating) sources of socio-economic inequalities (see Slovak, 2017). Going further, critical scholarly research has argued that PPAs as policy approaches are an emblem of the complex processes of neoliberalization of nature, delegating protected areas establishment and management to private actors and providing context for market-based conservation mechanisms (Adams, 2019; Adams *et al.*, 2014). In addition, and relatedly, empirical studies have showed that PPAs are reconstructing spaces and reshaping relational networks (social networks and human-non human relations), institutions and subjectivities (Slovak, 2017). These shifts are also claimed to be detrimental for the ecological integrity of the sites.

Scholars that frame conservation as a source of capital accumulation under neoliberalism, and/or draw on the Foucauldian concept of governmentality, have warned about the social impacts of PPAs proliferation (Büscher and Fletcher, 2014; Brockington *et al.*, 2008). Particularly, concerns have been raised about green grabbing. Considered a new frontier for capitalist expansion, land grab for ecological ends takes place when land is transferred from local rural communities to powerful - usually foreigner- elites or conservation NGOs (Büscher and Fletcher, 2015; Fairhead *et al.*, 2012). Regarding PPAs, this process has found to be built on historical processes of enclosures and land appropriation and often framed in the contest of neo-colonialism (Holmes, 2014; Langholz and Krug, 2004). Likewise, studies indicate that PPAs' creation have sometimes led to the concentration of land in the hand of wealthy landowners and/or has represented an obstacle to redistributive agrarian reforms (Holmes, 2014; Brockington *et al.*, 2008).

Even if green grabbing does not occur, a shift from a *de-facto* open access regime of the land to a more controlled access might take place (Buckley and Pegas, 2015) with great impacts on livelihoods based on traditional use of natural resources. Exclusion of people claiming rights to land has also occurred through “securitization” creating new military frontiers against poaching (Massé and Lunstrum, 2016) or through the implementation of ecotourism activities not affordable for local people (Ramutsindela, 2015).

All these repercussions have sometimes triggered local resentment towards the private conservation project, to the point of engaging local people in poaching as resistance act (Massé and Lunstrum, 2016). This refutes the alleged capacity of PPAs to facilitate the involvement of local communities in the management of the site, which is assumed by PPAs promoters to be consequence of their non-coercive nature. On this point, it is relevant to note that studies have referred several cases in which PPAs managers have intentionally excluded local communities from decision-making processes regarding the management of the area (Serenari *et al.*, 2016; Slovak, 2017).

When PPAs rely on ecotourism markets and/or offer environmental services to be traded in global markets (e.g. offsetting schemes) their rise is often framed as part of the process of commodification of nature. These practices prompt nature marketization and commodification, translating the value of nature into the language of economics thus disregarding and eventually conflicting with its intrinsic, cultural, and social values. This might re-shape local communities perceptions of the surrounding environment, for example fabricating an image of an “authentic” nature to be consumable by tourists. Furthermore, studies conducted in Zimbabwe and Yucatan have pointed out that PPAs practices recast local rural people as labourers. The reconstruction of nature as an eco-tourism product and the lack of the required skills to benefit from new job opportunities has led to alienate them from their environment (Brockington *et al.* 2008; Igoe and Brockington, 2007).

Research locating PPAs spreading in the context of the neoliberalization of nature also argues that PPAs practices largely rely on volunteer and individualized environmental responsibilities. This shifts the responsibility of nature conservation from governments to environmental stewards while compensating the hollowing out of the

state (Castree, 2005). The rescale of land conservation decision-making towards private actors have raised questions on the increasing role of private agenda setting and its implications (Gooden and Sas-Rolfes, 2020). Further, considering the loss in authority of governments in preserving public interest in relation to nature protection, concerns on PPAs effective long-term protection have also been brought to the fore. When this shift is accompanied by weak regulation, monitoring and enforcement, by governments or other institutions, it is expected to likely result in the establishment of “paper parks”.

Additional studies have also concluded that in ecotourism-led PPAs the search for financial sustainability may lead to privilege the preservation of few charismatic animals or introduce non-native species to attract more tourists, triggering ecosystems degradation (Jones *et al.*, 2005; Stolton *et al.*, 2014). The strength of PPAs protection is indeed a recurrent concern. However, it is usually not framed within the neoliberal conservation critique, yet it often emerge in the works of environmental scientists and conservationists (for a review see Gooden and Sas-Rolfes, 2020).

Particularly, permanence mainly depends on the country’s property regime and on the legal mechanisms applied (Rissman *et al.*, 2007). However, effective enforcement and monitoring is considered crucial. Also, in the case of a PPA owned and managed by an NGO a lack of financial sustainability, or a shift in the NGO focus for funding, is pointed out as a significant risk for PPAs permanence. On the other hand, in some case PPAs are seen as a precursor of more secure public protection (Langholz and Lassoie, 2002). Property regimes also influence the security of the protection provided by PPAs. The less the rights associated to real property right (e.g. mineral and other subsurface resources use rights), the less the security.

It is important to note that some of the issues outlined above are not entirely distinctive of PPAs. For example, in the context of austerity politics and budget cuts, state parks increasingly rely on market oriented solutions applying the logic “sell nature to save it” (McAfee, 1999; Youdelis, 2013). As regards the security and permanence of protection, downgrading, downsizing and degazettement events have been largely documented for public protected areas (Mascia and Pailler, 2011). Relatedly, global protected area estate was found to be biased towards locations that are cheaper to protect, adequately covering just the 15% of threatened vertebrates (Venter *et al.*,

2014). Adding to this, according to Gooden and Sas-Rolfes (2020: 1031) many issues emerging in the critical literature on private land conservation lack specificity and instead “*illustrate that conservation is a social phenomenon embedded within cultures and institutions that are themselves flawed*”.

While raising important points on ecological, social and economic benefits and pitfalls of PPAs both positions failed to provide conclusive research findings. First, it is important to mention that the positions mirror two different approaches in conservation: i) research *for* conservation mainly focusing on effective management for tackling biodiversity loss and ii) research *on* conservation, which explores conservation as a social phenomenon (Gooden and Sas-Rolfes, 2020). Second, the outlined debate is mainly built on a still limited number of empirical works that largely focus on cases in the Global South and Anglo-Saxon countries. Last, and crucially, both positions are still based on scant knowledge on the variety of institutional models that, depending on the diverse socio-economic contexts, are expected to decisively influence outcomes.

Generalizability is highly problematic, due to heterogeneous institutions and contexts, however we expect that a more systematic and transdisciplinary approach will help to unravel patterns of PPAs outcomes as regards environmental and social aspects. In order to i) going beyond a dichotomous viewpoint presenting alternatively PPAs as a panacea or rejecting PPAs altogether and ii) contribute to redress the geographical bias (Capano *et al.*, 2019) we will hereafter explore the institutional models of PPAs in EU countries. Shedding light on PPAs institutional setting is a crucial first step to understand under what conditions PPAs are able to nature conservation.

3.5 An heterogeneous landscape

With the purpose of selecting EU countries as case studies, data have been collected from the European Common Database on Nationally Designated Areas (CDDA)²⁹. According to the CDDA the countries that both i) formally recognize PPAs as a distinct governance typology within national protected area networks, reporting them

²⁹It is a database maintained for the European Environmental Agency (EEA) by the European Topic Center on Biological Diversity, holding data and information about protected sites and national legislative instruments that create and regulate protected areas. The accessed version is version n. 13.

as protected sites with private statute providing durable protection for flora, fauna and habitats and ii) have a list of officially recognized PPAs are: Finland, France, the Netherlands and Portugal. We have explored the case of these four countries assuming that they already have consolidated policy and legal frameworks for PPAs³⁰. Data have been collected from policy documents, legislative and legal acts and academic and grey literature.

3.5.1 Finland: a public-led programme for private protected areas

Since the 1970s Finnish nature conservation measures have received a policy framework built on the societal value of nature areas represented by the traditional right of access to the countryside, known as everyman's right (Girault, 2017). The majority of protected land in Finland is by far state owned. However, in terms of PPAs number, the Finnish case is outstanding with more than the 80% of protected areas included in its national network owned and managed by private actors, corresponding to roughly 8% of the total area under protection. These figures are explained by the successful implementation of the Metso Programme in Southern Finland, where land tenure is characterized by small-scale private land ownership (Primmer *et al.*, 2013).

The programme, approved in 2008 after a pilot-phase, has been designed and coordinated through the articulation of conservation and forest administrations. It is a public-led programme aiming at activating voluntary-based conservation agreements between forest owners and public authorities through payments for ecosystem services (PES). Forest-owners that voluntarily decide to participate receive a compensation for the timber income loss due to nature preservation practices and for the ecological features of the site. The agreement can be permanent or set for a specific time period (e.g. 10 years). In order to ensure cost-effective targeting of the actions and lands to be prioritized, ecological criteria indicated by an expert working group have been applied

³⁰ Experiences of PPAs are also documented in Austria promoted by the Austrian Forest Reserves Programme (Frank and Muller, 2003) and in Spain where the figure of "*custodia del territorio*" (land stewardship) was included in the 2007 Biodiversity Law. Additionally, in Galicia, autonomous community of Spain, there is a framework for the recognition of private nature reserves (Trujillo and Valencia, 2005). For a review of the legal basis for PPAs establishment in Belgium, Slovakia and Slovenia see Disselhoff, 2015.

and revised during the programme. Also, applied research has been funded by the programme to assess long-term impact on biodiversity as well as social impacts.

3.5.2 France: environmental organizations as agents for conservation

Initiatives of artists and naturalists' associations were at the origin of nature conservation endeavours in France in the second half of the 19th century. Present since the 1950s, state regulatory instruments for natural areas protection underwent accelerated development as a result of the 1980s decentralization process (IUCN France, 2013). Consequently, regional and local authorities have increased their power in the creation and management of protected areas.

As PPAs are concerned, since 2010 the French Environmental Code has recognized the national federation of environmental associations as a non-state agent for environmental and conservation policies. The national federation, created in 1989, is composed by 29 Natural Areas Conservation Societies (*Conservatoire des espaces naturels* - CENs) (Guignier and Prieur, 2010) which can both purchase the land, rent it through lease contracts, or enter into management agreements with public or private landowners³¹.

According to French national law, each CEN may request to the regional administration an approval in order to be legitimized as an actor with public service missions. It concerns not only the management of natural areas and land acquisition for conservation, but also the participation in public policies, the contribution to enhance knowledge on natural heritage and to raise environmental awareness through educational activities. The request for the agreement needs to be constituted by a five-year action plan and, if granted, it is set for ten years. During this period CEN present annual reports with the progress of their plans. Noteworthy, despite the creation in 2011 of a fund with the aim of receiving donation and land legacy, funding sources for CENs actions come mostly from state, regional and local authority budgets as well as

³¹ According to the 2016 CENs' Federation report the acquisitions represent 11.742 ha of "controlled" lands (942 natural sites), being the sites with management agreements the majority (87% corresponding to 126.433 ha) (CEN, 2016).

from EU programmes. Roughly 1% of the total funding comes from private sources (e.g. sponsors, donations) and less than 1% from compensatory measures³².

To sum up, recognized PPAs in France may be sites purchased by CEN that have received a statutory approval or sites managed by the same non-profit organizations with the use of private law tools (i.e. agreement with landowners). They differ from the former voluntary reserves that were willingly created by private landowners (under a law of 1976) which, along with voluntary reserves designated by local authorities, were replaced in 2002 by a new category of sites: the regional natural reserves (Guignier and Prieur, 2010).

3.5.3 Portugal: one private protected area in the national network

In Portugal, nature conservation measures were introduced during the authoritarian regime with the designation of the first national park in 1971. This occurred within a context of political constraints for civil society organizations action and pressures and opportunities at international level for environmental policy development. Since the 1990s decentralization initiatives, materialized in the recognition of protected areas created and managed by local authorities, have been coupled with the promotion of voluntary approaches for nature protection.

In particular, the Decree-Law n. 142/2008 states that private land that is not included in protected natural sites may be given the designation of PPA and integrated in the national network. In case of recognition, a binding management plan will be agreed with the national authority that manages protected areas. The application process requires that the designation of a PPA is requested by the owner(s), an environmental NGO or a legal entity the owner has concluded an agreement with. Conservation activities planned for the area management must comply with the objectives stated by national laws. Moreover, the law identifies as criteria for recognition “scientific, ecological social or scenic values” of the natural site, in need of special measures for conservation and management. As already referred, to date, just

³² Compensatory measures are those intended to offset the negative (residual) impacts of a project (CEN, 2016).

one PPA has been integrated in the national network of protected areas³³. It is a natural site owned and managed by an environmental NGO, created in 2000 to contribute to species and habitat conservation and the economic and social development of the north-eastern region of Portugal, which is characterized by the abandonment of agricultural areas. Its actions are based on the incremental purchase of lands for conservation purposes. In the absence of a public-led programme targeted to incentivise PPA designation, funding for management comes largely from national and EU programmes for conservation and international foundations (see chapter 5 and chapter 7).

3.5.4 The Netherlands

In the Netherlands, the major landowning nature protection organization was created in 1905 and the two first private national parks were established in the 1930s. Civil society and non-state actors have had a key role in the purchase and management of rural areas for conservation purposes. Government intervention followed later on with legislation protecting private estates (Elbersen, 2001), while the designation of further national parks only started in the 1980s.

In addition to the twenty national parks registered in CDDA as having a private statute³⁴ we should also consider the sites recognized and brought under the Nature Conservation Act in 1968 as nature reserves, which are owned and/or managed by private organizations and public bodies (Elbersen, 2001). Moreover, starting from the 1990s, the National Ecological Network of protected areas (EHS) has been designed through systematic planning, involving public entities as well as nature preservation organizations in EHS areas management.

In order to enable the completion of the pre-planned network of areas, the central government assisted in purchasing areas of private land acting as a land bank.

³³ Despite the formal recognition of just one site as PPA other experiences of privately protected areas exist. NGOs started in the 1990s purchasing land for securing conservation in areas outside the national system of protected areas (Pinto and Partidário, 2012) (see chapter 5).

³⁴ Two of them are privately owned and managed, the others have co-governance arrangements with stakeholders and local communities (Dubbink, 2008).

The purchased parcels were transferred to nature conservation organizations or traded with farmers in return for lands more valuable for biodiversity conservation contiguous to existing protected areas (Bakker *et al.*, 2015). This situation is nevertheless changing. Responsibilities for the pre-designed EHS implementation have been recently transferred to the Dutch provinces. Because of their financial situation that may jeopardise their role as land banks and the raising oppositions by the expropriation alternative, Dutch Provinces currently seem to prefer to provide NGOs with subsidies for land purchase (Bakker *et al.*, 2015).

3.6 Private protected areas as public-private partnerships

Our comparative study, show that a simple dichotomy, public actors versus private actors, state versus market, fails to capture the complexity that exists when a network of actors is involved in the design, implementation and management of PPAs. In particular, findings points out that under the label of PPAs different institutional models occur. Nevertheless, a common element across the cases emerges: they all have the features of public-private partnerships, differentiated by distinct degree of state actors' involvement as facilitator and regulator and by the nature of non-state actors.

In details, we observe a main distinction between state-driven conservation actions, as it is the case of the Finnish Metso programme that targets landowners providing monetary compensation for nature conservation efforts, and the other three case-studies. In France and Portugal, policy and legal frameworks for statutory recognition of protected areas managed by non-state actors (mainly non-profit organizations) has been successive to PPAs creation. In the case of the Netherlands PPAs recognition has built on traditional key role played by nature conservation organizations which has make them integral part of government strategies for the management of classified areas and for the establishment of new ones³⁵.

³⁵ The more recent Dutch model of national ecological network should be distinguished, since nature conservation organizations have been integrated from the beginning in the land planning receiving parcels to be managed or subsidies for land purchase from national and/or local governments.

Findings show that PPAs determine a novel interaction between state and non-state actors. This is established whether i) favouring NGOs and landowners with pro-conservation behaviours through the recognition and consequent legitimization of PPAs, ii) promoting PPAs with direct economic incentives or available funding, or applying a mix of the two approaches. Besides their supporting role state actors also: i) define and apply criteria for PPA recognition and/or requirements for receiving funding, aiming to articulate PPAs with other land plans and nature conservation instruments and ii) implement process oriented monitoring actions aiming to ensure transparency and accountability of private actors.

Therefore, drawing on the literature review of PPAs experiences worldwide, complemented by our comparative analysis of PPAs in Europe, we propose a definition of PPAs used as policy tools for nature conservation strategies. We define private protected areas as protected sites under voluntary long-term conservation, owned and managed by private actors (or under their control) relying on a variety of public-private partnerships settings. This definition will be applied throughout this dissertation.

Additionally, focusing on the characteristics of public-private partnerships models, particularly on the role of state actors as facilitators and regulators, we propose a conceptual framework for PPAs classification (see figure 3.1). The framework is meant to help comparing the variety of configurations that state actors and private actors interplays may materialize in order to conduct a systematic mapping of institutional models and assessment of on-the-ground practices of PPAs. This is crucial when discussing potentialities and pitfalls of this policy instruments and when proposing how policy and legal frameworks for PPAs should be enhanced to achieve intended outcomes.

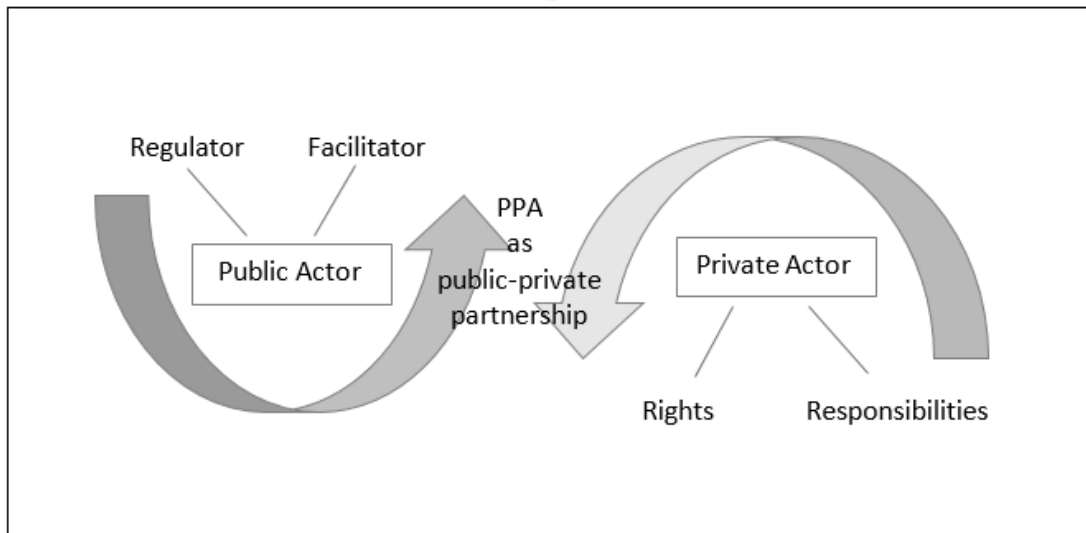


Figure 3.1 Private protected areas as public-private partnerships

As a final note, our findings mirror the remarks concerning the nature of Payment for Ecosystems services (PES) schemes. Scholars have found that few PES programmes are market-based in practice, functioning instead as state-led subsidies structures (e.g. Vatn, 2015). At first sight, this seems to drop the “charges” made by the neoliberal conservation critique (e.g. on marketization and commodification impacts).

However, drawing on the growingly recognized hybridization of environmental governance under neoliberalism, Fletcher and Büscher (2017:228) argue that despite the non-market nature of many PES schemes they can still “*advance a more general programme of neoliberal environmental governance*” with associated negative impacts. Put it differently, what we can learn from the PES debate is that the institutional feature is a significant aspect to be considered nonetheless, we should not lose focus on successively questioning how institutional settings function within specific contexts. To this purpose, building on this chapter, in the next chapters we will explore how PPAs have emerged focusing on the key factors influencing partnerships formation (in the Portuguese case study) and we will then develop and test a framework to assess their environmental and social impacts on a case-by-case basis.

CHAPTER 4. THE MULTIFACETED SHIFT FROM GOVERNMENT TO GOVERNANCE: A FOCUS ON NATURE CONSERVATION POLICIES

4.1 Introduction

In line with the large body of literature that explores the governance shift, empirical studies on policy instruments for nature conservation, show that hierarchical and regulatory modes have been complemented with presumably less intrusive and more collaborative approaches with local public actors, environmental NGOs, and landowners (e.g. Private Protected Areas-PPAs). This has occurred within a wider process of globalization and increasing state-market-civil society interactions' in policy formulation and implementation, taking place in a growing number of policy-making arena.

The purpose of the present chapter is to provide a conceptual and theoretical framework to explore the changes of modes of interventions in the peculiar policy realm of nature conservation, characterized by the reach of impacts beyond national boundaries, the existence of supranational legislation and the cross-sectoral impacts of regulatory activities³⁶. Principally, the literature review herein conducted aims to assist us in our investigation on *How and why did PPAs emerge as a complementary institutional model for protected areas in Portugal?* (see chapter 5).

We start with a short overview of the debate on the shift from government to governance, that is from state hierarchical forms of governing to more horizontal arrangements blurring the public-private divide. We will then focus on a particular governance mode, public private partnership, that has been detected as the characteristic institutional arrangement for PPAs as policy tools. The second part of the chapter will be devoted to the peculiar trajectories, and underpinning narratives, taken by the shift from top-down approaches to “new” interactions with non-state actors in nature conservation policies, particularly as regards the establishment and management of protected areas.

³⁶ The most discussed are the impacts on economic development.

4.2 New styles of governing

4.2.1 How far is governance going?

Governance is a polyvalent concept that covers a complex set of ideas and phenomena. It has different meanings depending on the institutional contexts and reflecting its diverse roots in different disciplines. The popularity of the concept, in the academic research and in political discourses, has been originated against the backdrop of the transformation of political orders, including the role of the State and the intensification of polycentric governance configuration.

In particular, according to Pierre (2000) the concept of governance in social sciences has two distinctive connotations. The first refers to the manifestation of state adaptation to its external environment as it emerges in the late twentieth century. This is also referred as “government to governance” shift, or governance rescaling (e.g. Apostolopoulou *et al.*, 2014) Governance thus differs from government, the latter stressing hierarchical decision-making structures, with law and regulation authoritative forms deployed by public actors, while the former entails the participation of public actors, private actors and civil society, through more horizontal forms of decision-making³⁷. The second meaning denotes governance as the conceptual representation of the co-ordination of social systems, drawing the attention at the set of formal and informal rules shaping the action of the actors, and at the novel forms of coordination.

Thus, two different perspectives emerge reflecting the distinct evolution of the concept in the comparative politics field. While the governance debate in Anglo-American context was more strongly influenced by ideological changes during the Reagan and Thatcher administrations (Kohler-Koch and Rittberger, 2006), in Germany, the concept has been linked to a theoretical development within the theory of the state.

As concerns the “government to governance” shift perspective, there is a widespread consensus on the replacement of state-centred modes of governing and the adoption, alongside the old state’s command and control approaches, of new governance models characterised by the “*development of market and network forms of*

³⁷Note that in international relations the concept of governance has been connected to the notion of more, not less, regulation.

interactions” (Capano *et al.*, 2015: 313). In detail, Lobel (2004) distinguished the following interrelated dimensions: i) Increased participation of non-state actors in policy-making; ii) public-private collaboration; iii) diversity and competition with the market iv) decentralization v) Integration of policy domains; vi) non-coercive approaches; vii) Adaptability and constant learning; viii) coordination.

On the other side, a debate has arisen on the impacts, introduced by this shift, on state capacity, namely its ability to control the policy process and provide defined outcomes (e.g. provide effective services) hinging upon democratic authority and legitimacy (Matthews, 2012). Significant scholarship has explored if and how the purported change of state’s role has occurred (see table 4.1). Distinct and intertwined factors explaining changes in governance patterns have also been highlighted.

Governance as the “hollowing out of the State”	The state is losing its previous responsibilities, shifted downward (local governments) upward (e.g. international organizations) sideways (civil society and market actors) Public perception of legitimacy has weakened	Rhodes (1994) Rosenau (1992)
Governance as the “hollowing out of politics”	Regulation is no longer enacted by public actors, but it is left to market forces, with a shift from politicians to experts Political and geographical reorganization of state intervention under neoliberalism	Swyngedouw (2005)
De-governamentalization	The State no longer monopolizes the governing of the general well-being of the population The goal of the new governmentality is the construction of self-regulating networks of responsible actors	Rose and Miller (1992)
A (new) regulatory state	The State redefines the way of governing through mobilization of private resources and networked collaboration with private actors From an interventionist state to a regulatory state (defining goals, rules and incentive structures) New capacities are developed, eventually enhancing regulatory reach	Koiman (2013) Pierre and Peters (2000)

Table 4.1 The debate on governance and state capacity.
Source: adapted from David Levi-Faur (2012)

Whilst some of the positions in the debate are not exclusive, a main divide is traced between i) scholars who have emphasised that exogenous forces (e.g. globalization and increasing of decision-making arenas) have challenged the traditional state hegemony and led to a reduction of its capacity, ii) and scholars arguing that the government-to-governance shift does not necessarily lead to a decline of government³⁸. Going further, empirical evidence was deployed to challenge the generalization of the “hollowing out” tendency and show that states, thanks to their resources advantage, have responded to growing societal complexity strengthening their governing capacity through new methods in steering actions (rather than “old style rowing”). These encompass soft regulation, fiscal conditioning and meta-governance, that is the regulation of networks through institutional design and discursive framing (Giessen *et al.*, 2016). Empirical and theoretical findings reveal that private actors’ capacity has been concurrently reinforced (Knill and Lehmukul, 2002).

Another strand of literature - the hollowing out of politics position - has shifted the attention from the “how much state” debate to question “which type of state”, emphasising the disconnection of policy from politics framed as part of a neo-liberal program. These contributions point out negative impacts of this transformation, restructuring the articulation between power and citizenship, which includes the empowerment of elites and the reduction of democratic participation (Swyngedouw, 2005).

To conclude, it is important to note that the critique moved to the governance approach is that it is a descriptive framework rather than an analytical tool with explanatory power in theoretical realm. However, as argued by Curry (2015) governance has never intended to be a theoretical perspective, nonetheless it can be used as a lens “to provide a better understanding of the processes at play in the move from government to governance” (George, 2004: 103), and a basis for theoretical development on how these have come to be.

³⁸ These two scholarships are presented as first wave and second wave of governance “lenses” (Matthews, 2011).

4.2.2 Public-private partnerships: combined efforts with divergent interests

Over the past decades, Public Private Partnerships (PPP) have gained widespread support and have been implemented all over the world in multiple public policy sectors at national and local level, as well as in transnational interactions. Acknowledging the multiple understanding of PPP present in the literature, we use the term PPP to broadly refer to a co-operative institutional arrangement between public bodies and private actors in the pursuit of societal goals, in particular in the design, management and delivery of public policy (Hodge and Greve, 2009).

This interaction may materialize in a variety of forms and contractual relationships (e.g. contracting out, joint business with shared risk, public leverage). They range from public-led partnerships to initiatives commenced by non-state actors. Various categorizations have been proposed, including for example those across the dimensions of control, funding and ownership.

Noteworthy, cooperation between the public sector and the private sector is not by far a new phenomenon. Contracting out was commonplace during the eighteenth and nineteenth-century, for example to build and operate railways in France. Earlier examples include the old Persian empire the state used to contract private financial firms to collect taxes used to build public infrastructures facilities (Wettenhall, 2003), and public funds provided during the Renaissance by the Republic of Florence to a charity organization with a key role in health care and poverty alleviation (Manetti *et al.*, 2017).

However, particularly since the early 1980s, the deregulation and privatization waves and the principles of New Public Management have encouraged PPP diffusion as pragmatic tools to solve government and market failures. Since then, they have indeed introduced a relevant disjunction, especially in those countries with a tradition of assets and services provision through social democratic welfare state (Skelcher, 2007).

Under limited government resources and cut-back of public sector investment, central justification for PPP rests on the combination on public and private resources crucial to deal with the complexity and dynamics of societal challenges. Put it differently, they are claimed to i) enhance the efficiency and effectiveness of public sector in

delivering public goods and services leveraging resources from private actors and applying market logics (Osborne, 2000) and ii) solving the pitfalls of purely private solutions thanks to the role of state as enabling and facilitating agent (Savas, 2000).

Concurrently, PPP are also advocated as a means to sustain civil society and enhance local community development through the inclusion of local needs in the policy making process (Osborne, 2000), thus decreasing the democratic gap.

As outlined in the previous section, current forms of PPP, as hybrid type of governance, are regarded as an emblematic manifestation of a restructuring of state intervention in society increasingly challenged by globalization process and by the move towards a neoliberal policy regime (Harvey, 2005). The positive rhetoric on PPP' advantages and potentialities mirrors a functionalistic logic. Functionalist accounts of the rise of public-private institutions emphasising their role in facilitating cooperation between actors in order to deal with societal complexification³⁹.

Additionally, there is a growing call to complement the focus on the macro conditions explaining PPP emergence with an actor-based perspective which questions the incentives of different actors to choose public-private institutions as preferred option (Andonova, 2006). Elaborating on the broader concept of co-governance Tosun *et al.* (2016:3) contends: *"it is not government failure per se that determines the co-governance of common goods, but the constellations of interests of the different actors groups and the opportunity structures in which they can pursue their interests."*

The picture given by empirical studies shows that private actors' interests encompasses the acquisition of resources (e.g. profits increase) the enhancing of their image, and /or the preservation of competitive advantages. In addition, non-economic rationales, such as philanthropic engagement, have been also pointed out. On the other side, budget constraints, ideological attitudes and lack of capacities to deal with specific societal issues intertwined with a pressing public demand are frequently referred as

³⁹ Particularly, the literature on public private transnational institutions mainly refers to the raise of innovative approaches in order to effectively deal with the complexification brought by the globalization process and the confluence of multiple crises (Van Bueren *et al.*, 2003). Similarly, the literature on network governance tends to emphasise the necessity of cooperative approaches to deal with the increased fragmentation of society and with the increasing of wicked problems.

drivers for state involvement in the literature (for a review see Tosun *et al.*, 2016). Sorensen and Torfing (2009:245) highlight that policy makers have been forced by *“isomorphic pressures to reshape public governance in accordance to the principles specified by the advanced liberal governmentality”*. Furthermore, a specific rationale for government collaboration with NGOs deals with their comparative advantages in trust building (Brinkerhoff *et al.*, 2007).

Furthermore, constructivist theories, that conceive actors as reflective rather than rational agents add to rationalist perspectives PPP role in building, and diffusing norms understood as *“shared expectations about appropriate behaviour held by a community of actors”* (Finnemore, 1996: 22). From this theoretical standpoint, participants in PPP accept certain norms, and act accordingly, aiming to reproduce their identity.

Another convergent research field that is crucial to mobilize in order to shed light on the factors triggering the formation of PPP, refers to the strands of literature on policy innovation and policy transfer/convergence, usually drawing on institutional theory. These have highlighted the key role played by epistemic communities in policy learning dynamics and are shedding light on the influence of policy entrepreneurs in promoting policy innovation. Not surprisingly, empirical contributions have shown that PPPs evolution and take-up depends on administrative traditions and national institutional legacy (e.g. Klein and Juhola, 2018). Nonetheless, recent studies have also made evident examples of coercive policy diffusion, namely of PPP, due to conditionalities imposed by international aid-granting organizations.

As regards PPP impacts, their proliferation has generated criticism. Evidences on effectiveness, (public) cost reduction, management overheads and innovation stimulus remain controversial⁴⁰. Most importantly, scholars argue that whilst the term partnership suggests an image of egalitarian and consensual decision-making, PPP exhibit differences of values and motivations, resource and authority, implying asymmetric power relations. Many claim that hybrid governance models, blurring the

⁴⁰ It is important to underline that generalising findings across studies on the various forms of PPP and comparing their performance with more traditional governance arrangements are difficult tasks.

public private divide, mainly serve business interests but not the public good. In order to address these contradictions different input legitimacy and accountability structures have been suggested by PPP advocates.

Papadopoulos (2003: 478) broadens the analysis claiming that “*narratives (...) in policy-making that stress the need for more cooperative relations between the formal locus of political decisions and other social forces are not part of any broad programme for democratising political institutions (...)*”. In this vein, as outlined below (section 4.3.2), the stream of literature on new governance arrangements in nature conservation emphasizes the convergence of interests between business capital and conservation.

4.3 The rescaling of governance in nature conservation and protected areas

Over the last decades, the policy domain of nature conservation has witnessed the proliferation of new governance arrangements and innovative policy tools (e.g. market based instruments, ecolabels, and voluntary agreements - see also chapter 3, section 3.2). These are often promoted as promising instruments both for the empowering of citizens and for their effectiveness in tackling nature degradation, supporting a sustainable use of natural resources. Increased legitimacy and access to non-state actors expertise as well as knowledge co-production are also widely referred as rationales for their creation. Remarkably, studies show that new governance models do not replace existing regulatory approaches, but supplement them (Armitage *et al.*, 2011).

This transition has occurred in the context of increasing international cooperation to tackle environmental degradation, the rise of new local and transnational environmental movements and the emergence and proliferation of environmental NGOs and market-oriented actors' initiatives (Larsen and Brockington, 2018). For examples, front-runners companies, in some cases in partnership with NGOs, have been implemented new self-governance practices, such as corporate social responsibility mechanisms (Driessen *et al.*, 2012).

Protected areas have a long history and are still widely recognized as the cornerstone of conservation policies and actions. Today they cover about 15% of the

land surface of our planet (UNEP-WCMC *et al.*, 2018) becoming “*one of the most significant spatial structures of contemporary times*” (Kupper, 2014: 1); an area that is set to extend rapidly in the next future.

Over the last four decades strategies for PAs establishment and management have witnessed a paradigm shift towards more inclusive approaches. Concurrently, centralization and hierarchical forms of interventions are increasingly giving way to public-public and public-private partnerships and the promotion of various forms of “ecological self-organization” (Jordan *et al.*, 2003).

4.3.1 Towards people-centred protected areas?

Since the late 1800s, early narratives of conservation were framed in terms of the preservation of pristine environments, minimizing the impact of resident people that were excluded both politically and physically from parks (Hutton *et al.*, 2005). The U.S. “Yellowstone model”, or “fortress conservation” mode, encompassed central state top-down designation, and the (re)production of wilderness, also for recreational purposes. It influenced national parks and PAs establishment worldwide, although with significant re-interpretations and the emergence of alternative benchmarks⁴¹ (Adams, 2019; Kupper, 2014).

From the late 1970s onwards, the global diffusion of community-oriented models, designed to ensure the people participation and balance conservation with local livelihoods needs, was prompted by multiple factors encompassing the upsurge of indigenous people movements and the posterior emergence of the sustainable development concept bridging the environmental dimension with the social and economic ones (Jeanrenaud, 2002). Thus, the first parks exclusionary denial of indigenous peoples’ rights has been gradually replaced by people-oriented approaches promoting the participation of people in decisions affecting them (Corson *et al.*, 2014; Berkes, 2007).

⁴¹ For example, the Swiss park model involved scientific research purposes.

According to Hutton *et al.* (2005), this shift of narratives and policies mirrored a pragmatic stance that largely resulted from the self-interest of the conservation constituency, which, during the late 1970s, correctly recognised that *“fortress conservation would be difficult to maintain politically in the face of objections by local people and their political leaders, in countries with renewed democracies”* (*ibidem*: 343). Integrated conservation and development projects widely promoted by international conservation agencies, gained momentum in developing countries promising win-win solutions (Lele *et al.*, 2010).

This participatory turn in protected areas, has been underpinned by principles of participative and deliberative models of democracy (Mellinger and Floriani, 2015). Public participation in environmental decisions has proven to be crucial for raising awareness on environmental issues, and for building local management capacity (Beierle and Cayford, 2002). It is argued that more inclusive models, thanks to their “learning component”, may promote the empowerment of participants in defining and meeting their own needs (Bulkeley and Mol, 2003).

Besides contributing to the democratization of environmental decision-making processes, participation has a significant instrumental value. In fact, positive perceptions of governance are related with improved effectiveness in terms of biodiversity conservation, as participation in natural resources management process raises social acceptance and compliance levels (Hatcher *et al.*, 2000). In addition, it reduces management costs since voluntary compliance may eventually substitute top-down enforcement (DeCaro and Stokes, 2013). Moreover, participatory governance contributes to opening up the policy process embracing the diverse knowledges and values related to biodiversity, mitigating the limits of technocratic science-led solutions and leading to higher quality decisions (Reed, 2008). These arguments have been classified as substantive motivations, complementing above-mentioned instrumental and normative rationales (Wesselink *et al.*, 2011).

Public participation, promoted in its diverse though not always exclusive facets, is nowadays incorporated in conservation agendas and integrated in legal instruments (e.g. the Aarhus Convention). It may encompass a range of procedures taking place at different stages of the policy-making process (Reed, 2008).

Participation is nevertheless contested and its pitfalls have been pointed out (Rauschmayer *et al.*, 2009a; Turnhout *et al.*, 2010). First of all, it has been acknowledged that increased stakeholder involvement does not necessarily lead to the achievement of nature conservation goals (Young *et al.*, 2013). Second, there is a critical gap between the paradigm shift in agenda for conservation and its practice. For example, in some cases regarding the implementation of the EU Natura 2000 network the policy process was mostly top-down and expertise-driven (Rauschmayer *et al.*, 2009b). In Pellizzoni's words (2003: 213) the crucial question "*is not how much participation, but what kind of participation, by whom, to which purposes*". Indeed, power inequalities are barriers for effective participation since previous marginalized groups may have limited power to influence decisions. Last but not least, critical analyses of participatory approaches note that in a post-political arena, which perceives conflict as something that should be avoided through consensus (Laclau and Mouffe, 2001), participatory practices may degenerate in a technocratic exercise of problem solving (Cleaver, 1999).

4.3.2 Connecting the dots: interplays of actors at different scales

The promotion of local communities and other stakeholders involvement in decisions affecting them has been accompanied by the emergence of institutional configurations and hybrid governance models with permeable boundaries between public and private dimensions. The rescaling of governance, in nature conservation - upward, downward and sideways (see table 4.1)- is a reflection of a wider context characterized by a multiplication of actors engaged in nature conservation and by the reconfiguration of state, markets and civil society interactions, as outlined in the previous sections.

At the international level, among a wide array of multi-lateral agreements for nature conservation, the 1992 Convention of Biological Diversity stands as a major actor setting ambitious targets for PPAs coverage and promoting innovative approaches (e.g PPAs, see chapter 3, section 1). The elaboration of strategic plans has recently seen the collaboration of a networked institution of experts, the Intergovernmental Panel on Biodiversity and Ecosystem, established in 2012, aiming to bridge science and policy.

The constellation of actors composing the multilevel governance dimension, that increasingly sustains protected areas, also encompasses the European Union (EU). In EU member states, the designation of the EU Natura 2000 network spatially (and institutionally) overlaps with the national system of protected areas. Concurrently, initiatives such as the Business and Biodiversity platform show the EU Commission's commitment in attracting private investment for conservation (Apostolopoulou *et al.*, 2014).

Concurrently, a global trend towards devolution of power and responsibilities to local authorities is also found in conservation management, mainly promoted by international organizations (e.g. UN) and expert communities. Evidences at the country level show that democratic decentralization has followed a variety of paths (Hongslo *et al.*, 2016).

Furthermore, the growing role of local and international conservation NGOs is particularly highlighted due to their marked engagement in a plethora of evolving actions. In particular, these seem to be moving from advocacy and confrontation, sometimes successfully influencing domestic policies, to legal formalization, interactions and cooperation with state actors (Larsen and Brockington, 2018).

As a result, state actors share nature conservation endeavours, with national and international organizations, local authorities and private actors. Indeed, actors' interplays along spatial scales and interdependent levels of policy-making are becoming more complex, triggering legitimacy and accountability issues (Paavola *et al.* 2009, Armitage *et al.*, 2011).

The governance rescaling in conservation policies have been explored by political ecologists and critical geographers who have focused on the convergence and intersections between conservation and neoliberalism. The proposed analyses offer valuable insights. Concisely, neoliberalism is conceptualized as a dynamic process that manifests itself in multiple ways, depending on its articulation with diverse contextual settings (Fletcher, 2019). In particular, the neoliberal political-economic programme promotes "*individual entrepreneurial freedom and skills within an institutional framework characterized by strong private property rights, free market and free trade*" (Harvey, 2005:2). This overarching rationale is expressed through a bundle of processes

(see table 4.2) which have been shown to have shaped environmental and conservation policies over the past decades (Holmes and Cavanagh, 2016; Fletcher, 2019), gaining force after the 2007 economic crisis.

Processes	Definitions	Examples
Privatization	The conversion from public/state or common property to private property	Enclosures, Privatization of wildlife
Commodification (C) Marketization (M) Financialization (F)	(C) the re-articulation of things, interactions and services as commodities (M) the regulation of commodities exchanges via markets (F) the creation of derivative commodities	Carbon sequestration, Payments for ecosystems services schemes, biodiversity offsets markets
Deregulation and reregulation	Downsizing of state interference and active construction of regulatory frameworks (two subsequent phases)	Regulation of carbon markets
Decentralization/promotion of civil society “flanking” mechanisms	Delegation of functions to private actors (e.g. NGOs, community organizations, firms) and “self sufficient” individuals	Private protected areas

Table 4.2 Processes of neoliberal conservation.

Source: adapted from Castree (2010), Holmes and Cavanagh (2016), Fletcher (2019)

Remarkably, from the standpoint of the neoliberal critique, state (and international organizations’) role is active both in the creation of new markets through (re)regulation, privatization and commodification (roll out neoliberalism) as well as attracting private investment to compensate the reduction of public funding for conservation. Also, neoliberal governmentality frames conservation as an apolitical intervention able to conciliate environmental preservation, economic growth and local communities’ access to decision making.

It has been suggested that such a context, reinforced by the rhetoric of consensual decision-making, has created favourable conditions for the emergence of powerful NGOs and the proliferation of public-private partnerships such as private protected areas (Lockwood, 2010; Slovak, 2017).

Variegation of trajectories across countries have been pointed out by recent comparative studies. These works also clarify that i) the processes presented in table 4.2, whilst not in the current prevalent and intensified forms, were present in previous

capitalist phases and that ii) not all the forms of rescaling are manifestations of a neoliberal agenda in conservation (Holmes and Cavanagh, 2016; Apostolopoulou *et al.*, 2014).

In this line, according to Lockwood (2010) alongside the neoliberal conservation projects, the recognition of indigenous people's right in reaction to displacement from protected areas, more informed citizenry and the failure of top-down and non-landscape-based approaches have also played a relevant role in shaping current conservation policy and protected areas governance.

Concerning the implications of these moves, critical approaches have warned about the growing opportunities for private actors to build alliances with state power that threaten the transitions towards more egalitarian and sustainable socio-ecological arrangements (Büscher *et al.*, 2012; Corson *et al.*, 2014). Indeed, the resulting institutional solutions, instead of tackling the root causes of economic and ecological crises, are blamed to turn these into opportunities for capital accumulation, exacerbating socio-economic inequalities.

As an illustration, co-management practices between state actors and local communities for protected areas, have been found to occasionally lead to the co-optation of community-based resources management and the reinforcement of local elites (Berkes, 2009).

4.4 The way forward

Over the past decades, the growing demand for public participation has occurred in a context in which state authority has being reconfigured. Particularly, we have outlined two intertwined tendencies that have shaped conservation policies: the participatory turn and the move towards collaborative arrangements for policy design and implementation.

So far, not much attention has been given to the materialization of these changes in institutional arrangements for protected areas. The body of knowledge on why particular institutional models have been adopted and how they have been implemented is still thin. Empirical evidences are needed to discuss more deeply if and

to what extent a transformation is actually ongoing, and to describe the trajectories that this has been taken and the ways it is evolving. Furthermore, it is crucial to question the claims of the new governance paradigm in nature conservation critically exploring the socio-ecological consequences of these changes.

The next chapters will engage with these essential questions focusing on the rise of PPAs as public-private partnerships and the implications of their on-the ground practices in Portugal.

CHAPTER 5. PRIVATE PROTECTED AREAS IN PORTUGAL: AMIDST GOVERNANCE RESCALING AND PUBLIC INVOLVEMENT

5.1 Introduction

In the previous chapters we reviewed the literature on Private Protected Areas (PPAs) (chapter 3) and situate their diffusion and promotion against the backdrop of a governance shift in nature conservation policies (chapter 4). Drawing on this, the present chapter aims to shed light on PPAs emergence in Portugal, setting forth a critical analysis of governance dynamics concerning Protected Areas (PAs) establishment and management.

Here we will address the second research question: *How and why did PPAs emerge as a complementary institutional model for protected areas in Portugal?*

For this purpose, we will conduct a systematic investigation into when and how non-state actors' role has been recognised and promoted in the Portuguese policy and legal frameworks for PAs. The main drivers explaining the appearance of PPAs will be disentangled, applying a multilevel governance perspective and considering both state actors and non-state actors interests and agency. Concurrently, the analysis is intended to unveil contradictions regarding the (re)shaping of partnerships and public participation for PAs.

Portugal has been chosen as a case study since its evolving paradigm of nature conservation policies and opening up of PA governance is expected to entail great change and interesting implications in regard to the interactions of state and non-state actors. In particular, the inclusion of non-state actors in the governance of PAs, through public-private partnerships, clashes headfirst with the Portuguese centralised top-down institutional heritage.

The chapter is structured as follows. The first part briefly outlines the history of Portuguese nature conservation policies focusing on the evolvement of the national system of protected areas. The second part presents the methods used for data

collection and analysis. The results of the analysis will then be detailed: PPAs recognition as policy tool for nature conservation will be reconstructed within more overarching moves of governance rescaling and public participation promotion in PAs governance.

5.2 The makings of the national network of protected areas

5.2.1 Genealogy of nature conservation policies

In Portugal since the 1970s, PAs have been a key implementation mechanism for nature conservation policies. Portuguese PAs were, and still are, established in landscapes shaped by anthropogenic modifications resulting from traditional human activities, and characterised by private land tenure. The first PAs were created in the early 1970s during Portugal's authoritarian regime (1926-1974) under a context of pressures and opportunities at the international level⁴² (Brandão, 2015; Schmidt, 2008; Soromenho Marques, 1998), the absence of a diffused domestic interest in environmental concerns and political constraints on the actions of civil society organisations⁴³ (Figueiredo *et al.*, 2001).

Concerning the latter, the *Liga para a Proteção da Natureza* (LPN), the first Portuguese environmental NGO created in 1948 is at first sight an exception. Nevertheless, related to international conservationist movements of the time, its membership consisted mainly of academics and its work in the first phase was mostly scientific. Data gathered on habitat and species gave birth to a list of priority sites to be protected. This list, drafted at request of the government and successively financed by the national energy company, was the basis for the establishment of many PAs.

⁴² The regime took advantage from the international cooperation to tackle environmental issues for repositioning itself at international level (Brandão, 2015; Schmidt, 2008). Its participation in the 1971 symposium on Environment in Prague, and in the 1972 UN General Assembly in Stockholm, had also a key role in the development of a national environmental policy. Indeed, these events were a driver for: i) the cooperation of public administration bodies in the elaboration of reports on national environmental issues ii) the rise of environmental awareness within governmental elites and public functionaries (Brandão, 2015).

⁴³ During the Estado Novo few sporadic protests took place mainly against the pollution of local natural resources, vital for local economy and human health (Rodrigues, 1995). One of these protests gave birth to the first environmental grassroots movement: the Antipollution Fight Committee-Popular Ecological association (CLAPA) (Barca and Delicado, 2016).

It was the European Year of Nature Conservation in 1970 the occasion to enact the first Law on nature conservation (Law n. 7/70) and establish the Peneda Gerês National Park, in 1971, which followed the U.S. “Wilderness model”⁴⁴. Successively, after the 1974 Revolution⁴⁵, the new democratic government created the Secretariat of State for the Environment and the National Service of Parks, Reserves and Landscape Heritage (hereafter the National Authority)⁴⁶.

As regards civil society pressures, the anti-nuclear protest in Ferrel in 1976 was a central event for environmentalist movements. In line with the radical character of the grassroots movements in the post-authoritarian phase, the protest was marked by discourse against economic growth, consumerism and technocratism (Delicado and Barca, 2016; Rodrigues, 1995). Also, unlike precedent local protests it was not a NIMBY (not-in-my-backyard) resistance since it was carried out by a coalition of actors at local and national scale, from urban and rural environments, requesting public participation in decision making process (Nave, 2000; Delicado and Barca, 2016).

In addition, in the field of nature conservation, it is important to refer the Serra da Malcata campaign⁴⁷, led by the LPN in 1978, as the only case of broad public support for the designation of a PAs.

The admission to the European Economic Community (EEC), in 1986, accelerated the development of policy and legal frameworks for nature conservation policies. (Figueiredo *et al.*, 2001). In particular, the approval of the Environmental Framework Law in 1987 (Law n. 11/87) gave consistency to policy making in this sector⁴⁸ and initiated the process of the transposition of EEC directives into national law.

⁴⁴ It is important to note that the first protected area, an ornithological reserve dating back to 1957 (*Reserva ornitológica do Mindelo*) had a legal status thanks to the efforts of a professor and through the forestry regime. National forests, old royal hunting reserves and monasteries’ areas had contributed until then to nature preservation (Alho and Lopes, 2010).

⁴⁵ The 1976 Portuguese Constitution enshrined the fundamental right to a healthy environment.

⁴⁶ This is the first, and only, National Authority responsible for the management of PAs to this day, despite multiple subsequent designations, organisational designs and competences framework changes.

⁴⁷ It aimed to stop the eucalyptus plantation for pulp production that would destroy the habitat of the last members of Iberian lynx (Baptista, 2010).

⁴⁸ The implementation of spatial planning instruments preventing urban development initiatives in a network of targeted areas was already underway thanks to designation of REN (National Ecological Reserve) and RAN (National Agricultural Reserve).

Concurrently, the landmark Environmental Association Law (1987) boosted environmental NGOs' empowerment.

Whilst the post-authoritarian phase had witnessed some environmental protests with a radical character, the institutional recognition facilitated the consolidation of environmentalist associations which started to gain visibility at the end of the 1980s (Figueiredo *et al.*, 2001). Remarkably, in order to expand conservation areas beyond already established PAs, environmental NGOs began to purchase land via EU funding programmes during the 1990s (Pinto and Partidário, 2012).

The 1980s witnessed the designation of a significant number of new PAs. Starting from the late 1990s, the implementation of the EU Natura 2000 network marked the expansion of the network of classified areas (see also below)⁴⁹. In sum, a multi-actor and multilevel governance context emerged as the 20th century came to an end.

5.2.2 Protected areas' management goals and governance categories

Since the enactment of the first act for nature conservation (in 1970) successive, and in some cases coexistent, management philosophies have underpinned the designation and management objectives of PAs (see Pinto and Partidário, 2012). Currently, five different PAs categories exist: national parks, natural parks, nature reserves, protected landscapes and nature monuments. According to the present legislation, they are characterised by different features and management objectives (see Table 5.1).

⁴⁹ While the Decree-Law n. 19/93 introduced the national network of PAs, it was successively integrated in the overarching network of areas for nature conservation encompassing also classified areas established under international conventions, the EU Natura 2000 network and areas delimited by REN, RAN and public hydric domain regimes (Decree-Law n.142/2008).

National parks	They protect representative sites of natural regions, humanised and natural landscapes and geological sites, with scientific, ecological or educational values. Active management objectives include species recovery and the promotion local sustainable development
Natural parks	They provide the conditions for the preservation of ecosystems created through sustainable human activities. Their management also aims to contribute to regional and local development
Nature reserves	They preserve areas characterised by ecological, geological and physiographic features and are not permanently or significantly inhabited
Protected landscapes	They cover areas produced by a balanced interaction of people and nature. Their objective is to ensure the protection of significant aesthetic, ecological or cultural values, for example through the promotion of local traditional sustainable practices
Nature monuments	They are established to set aside relatively small areas characterised by outstanding natural features (e.g. geological formations) with ecologic, aesthetic, scientific or cultural value

Table 5.1 Categories of Portuguese protected areas.

Instead, the governance categories we will focus on, as regards their genesis and characteristics, are the following:

- i) national PAs, that are managed by state actors, in particular by the National Authority;
- ii) regional and local PAs, managed by local authorities;
- iii) Private Protected Areas.

Nowadays national PAs can be classified under one of the five management categories mentioned above, while regional and local PAs can adopt whichever designation except for the national park classification (see figure 5.1).

The structures of management have undergone changes over time. However, they are not generally dependent on the management categories but on the governance categories (detailed in the following sections). Nature monuments are an exception since they are small areas directly managed by the National Authority. Moreover, as regards to restrictions and management objectives, it is important to note that Decree-Law n. 19/93 established the obligation of a spatial plan for national and local/regional PAs (except for nature monuments), until then most PAs were managed based on a list of regulations published in the designation act. Successively, Decree-Law n. 142/2008 removed the requirement of spatial plans for all PAs except national parks and nature national parks.

The national network of PAs, which will be the focus of our analysis, is complemented by and often overlaps with the Natura 2000 sites and other classified areas established under international commitments (e.g. Ramsar sites). The Natura 2000 network, established to nationally implement the EU Habitats and Birds Directives, covers approximately 22% of the Portuguese terrestrial area. The sectoral plan establishing the orientations for the preservation of natural values in Natura 2000 areas, was adopted in 2008 after a public hearing process. The National Authority, local authorities and other authorities with relevant territorial and sectorial jurisdiction in the areas are responsible for the management of Natura 2000 sites. While the Natura 2000 network is not directly analysed, it is important to highlight that its governance makes the case for the Europeanisation of nature conservation policies.

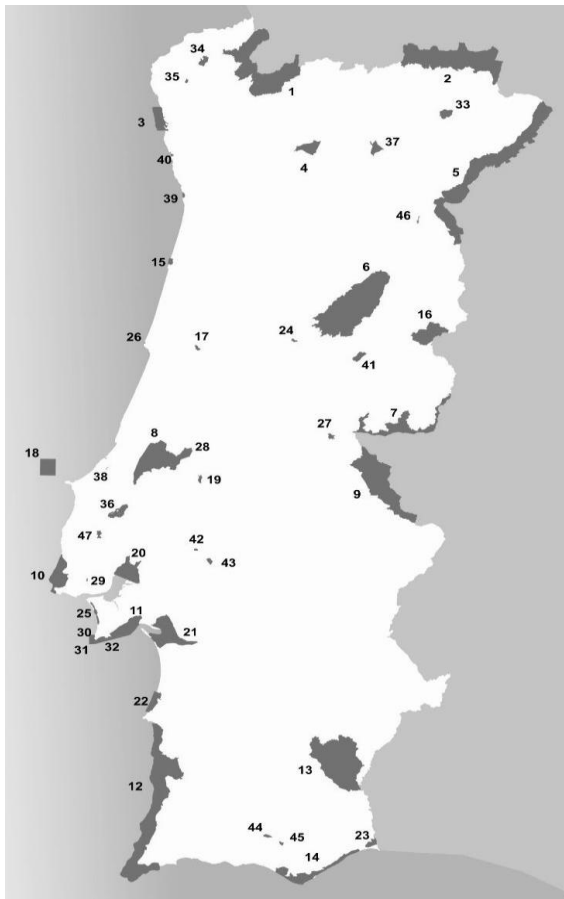


Figure 5.1 Portuguese national network of protected areas (Portuguese mainland)

Source: elaborated from www2.icnf.pt/portal/ap/rnap, accessed 20/03/2018.

Notes: 32 national PAs, identification number (ID): from 1 to 32 (1 national park, ID 1; 13 natural parks, ID from 2 to 14; 9 nature reserves, ID, from 15 to 23; 2 protected landscapes, ID 24 and 25; 7 natural monuments, ID from 26 to 32). 14 local and regional PAs, ID: from 33 to 45 and 47. (1 natural park, ID 37; 2 nature reserves, ID, 38 and 39; 11 protected landscapes, ID from 33 to 36, from 40 to 45 and 47). One Private PA, ID: 46.

5.3 Data collection and analysis

To illustrate the involvement of non-state actors regarding the design, implementation and management of Portuguese PAs, we: i) conducted a systematic review of national policy and legislative documents; ii) carried out semi-structured interviews with representatives from the national administration, NGOs and local nature conservation policy experts. Using triangulation analysis, we integrated this data with literature on Portuguese PAs.

The period of analysis ranges from 1970 to 2015, in particular from the enactment of the first Protected Areas Act in 1970 to the amendment of the 2008 Decree-Law on Biodiversity and Nature Conservation, introduced in 2015. The key pieces of reviewed legislation are listed below.

- (i) Protected areas Act n. 9/70, 19 June 1970: first Portuguese law on PAs;
- (ii) Decree-Law n. 613/76, 27 July 1976, regulating the designation and management of PAs, and Decree n. 4/78 on PAs' management structures;
- (iii) Decree-Law n. 19/93, 23 January 1993, creating the national network of PAs;
- (iv) Decree-Law n. 221/2002, 22 October 2002, amendment to Decree-Law n. 19/93;
- (v) Decree-Law n. 136/2007, 27 April 2007 and Decree n. 530/2007, of 30 April 2007, on internal organisation and competences of the reformed National Authority;
- (vi. a) Decree-Law n. 142/2008, 24 July 2008, on Biodiversity and nature Conservation Juridical Regime;
- (vi. b) Decree-Law n. 242/2015, 15 October, 2015, amendment to Decree-Law n. 142/2008.

Desk study was complemented with a total of 17 semi-structured interviews (see Appendix I), conducted between 2016 and 2017, with: i) 6 representatives of state administration (i.e. officials or ex-officials of the National Authority responsible for nature conservation policies and the management of PAs), ii) 7 representatives of environmental NGOs, and iii) 4 key experts (i.e. scholars and representatives of the National Commission on Environment and Sustainable Development - CNAD). Interviews lasted between one hour and one and a half hours, they were recorded and transcribed. The interviewees were chosen in view of the need to cover the period referred to above.

In order to complement an initial list of respondents, we used the technique of snowball sampling. The aim was twofold: i) to validate the chosen policy framework and ii) to gather additional data to better trace the evolution of the roles of and interactions between state actors, local public actors and private actors (e.g. NGOs) in PAs institutional settings.

The framework we employed to systematise and analyse the collected data is based on the one developed by Niedzialkowski *et al.* (2016) to investigate non-state actors' participation in Polish PAs. It was selected as it enables a systematic diachronic analysis of the involvement of different groups of actors during distinct phases within the governance of PAs. In particular, Niedzialkowski *et al.* (2016:1897) identified five key legal issues underpinning the governance model of PAs: "(1) establishing a PA; (2) introducing restrictions; (3) creating management rules; (4) determining the organisation of the administration of PAs; (5) appointing a person in charge of the administration of PAs". Adapting this framework to the Portuguese context meant merging the last three issues into 'defining the management rules'. In sum, our analytical framework involves three distinct phases: i) designation of a PA; ii) introduction of restrictions on PA territory; iii) management structure.

The first phase (designation of a PA) refers to the creation of a PA, addressing the question: who is involved in the assignment of the designation of PAs? ii) The second phase (introduction of restrictions) encompasses: a) the adoption of PAs' spatial plans which define the objectives of the protection and the management of the site, listing all the activities prohibited or subjected to authorisation in each identified zone; b) or, other regulations defining restrictions. iii) The third phase (management structure) considers the criteria for the appointment and the composition, as well as the powers of management bodies (e.g. directive and consultative bodies), whenever explicated in the legislative acts.

Governance actors of PAs have been chosen according to the typologies identified in national legislation: i) state actors; ii) local authorities; iii) NGOs; iv) citizens; v) local landowners; vi) other stakeholders. The 'citizens' category encompasses local communities and the general public. The category of 'landowners' reflects the relevance of these stakeholders in a territory where private property is by far the most common

land tenure. The ‘other stakeholders’ category encompasses associations (e.g. socio-economic and cultural associations) and research institutions. Specifically, private companies are included in this category, as they are represented through organised interest groups in the governance of PAs. Note that the proposed categories may overlap; for instance, a national or local NGO or a private company may also be a landowner.

Different approaches and typologies of stakeholders’ participation have been developed to analyse actors’ contribution in decision making (see Reed, 2008). Drawing upon Niedzialkowski et al. (2016) and on the ladder metaphor (Arnstein, 1969), our scale for actors’ involvement ranges from “no involvement” to “decision making” (Table 5.2). We refined the framework to adapt it to the typologies referred to in the Portuguese legislation on PAs. Specifically, unlike Niedzialkowski *et al.*’s (2016), we do not refer to the “information” typology of actors’ involvement and we also add an intermediate step: “proposal”, which denotes a situation where certain actors could initiate a decision making process, but the final decision is dependent upon another actor altogether.




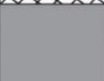
No involvement	The actors are not referred in the legislation as participants in the decision-making process	
Consultation	A feedback by a particular group of actors is sought, however inputs provided do not need to be followed	
Proposal	The actors can initiate a decision-making process, however the final decision on it depends on another actor consent	
Consent	In order to take a specific decision the actors have to approve it or agree on it	
Decision making	The actors can initiate a binding decision-making process and take a final decision on it	
Not applicable		X

Table 5.2 Actors’ involvement in the decision making process
Source: Adapted from Niedzialkowski *et al.*, 2016

5.4 Toward more inclusive approaches and partnerships

Tables 5.3 and 5.4 present the changes in involvement for state and non-state actors regarding PAs’ i) designation ii) introduction of restrictions iii) management structure - between 1970 and 2015.

Two main intertwined patterns of changes have been identified: i) a shift towards more inclusive approaches, both in terms of public participation and the inclusion of local authorities in the decision making processes for the management of national PAs (with a recent step back); ii) the emergence of PAs created and managed by local public actors and private actors.

This change has broadened PAs' designation options, giving private landowners, and (according to the current legislation) private actors managing private lands, the right to establish and manage a PA integrated into the national network.

5.4.1 National protected areas: deepening stakeholders' involvement?

As regards to national PAs, which are managed by state actors, our analysis reveals a gradual shift from a top-down approach, to the introduction of rules that promote non-state actors' involvement in the decision making process.

It is worth noting that, the first Protected Areas Act established that the inhabitants of National Parks would receive compensation for the loss of land's profitability due to restrictions. However, this provision remained unimplemented. Moreover, the Peneda-Gerês National Park was established and managed by governmental actors (Forestry Services) through a top-down approach.

As a result of the transition from the authoritarian to the democratic regime, the non-obligatory presence of local authorities in the consultative body of the National Park (and other upcoming PAs) gained a substantial and distinct connotation, as they became the democratically elected representatives of local communities. Nevertheless, until the enactment of the Decree-Law n. 19/93, the decision making power, regarding: (i) the designation of a PA; (ii) its restrictions and (iii) its management, mainly remained in the hands of state actors.

In particular, the Decree n. 4/78 stated that each PA would have a director, designated by the president of the National Authority, holding management powers and supported by two consultative bodies: a general commission with local and central authorities, representatives and a scientific commission (see table 5.5). However, this

model was not compulsory; its application depended on each PA's importance and extension.

	LAW N. 9/70	D.L. N. 613/76	D.L. N. 19/93	D.L. N. 221/2002	D.L. N. 136/2007 D. N. 530/2007	D.L. N. 142/2008
	NPA	NPA	NPA	NPA	NPA	NPA
			A B		A B	A B
State Actors						
Designation				X X	X X	
Restrictions				X	X	
Management				X		
Local Authorities						
Designation				X X	** X	
Restrictions				X	X	
Management		*				
Envi. NGOs						
Designation				X X	** X	
Restrictions				X	X	
Management		*		X	X	
Citizens (local communities)						
Designation				X X	X X	
Restrictions				X	X	
Management				X	X	
Other Stakeholders						
Designation				X X	** X	
Restrictions				X	X	
Management				X		

Table 5.3 The involvement of state and non-state actors in national protected areas

Notes: NPA = National Protected Areas (A) refer to national PAs designated by National Authority; (B) refers to national PAs' designation proposed by local authorities or private actors.

(*) The consultative bodies with representatives of local authorities and NGOs were not mandatory, depending on the importance of the PA.

(**) According to the Decree-Law n. 136/2007 the advisory commission of the National Authority encompasses, among other members, two representatives of environmental NGOs as well as representatives of the association of local authorities and of stakeholders' organisations. We assume that they are 'directly' consulted in case of a new national PAs designation

(***) According to the Decree-Law n. 221/2002 the consent of the consultative body was required to grant an authorisation for specific activities listed in the spatial plan. We highlight the shifting role of the local authority category, amongst other members of the body, because the decree-law was specifically adopted to improve local authorities' power.

Decree-Law n. 242/2015 is not analysed in this table since it introduced clarifications especially on local and regional PAs (see table 5.4). It also defined the transposition of national PA plans into spatial plans at the municipal level. However, this amendment has not yet been enforced due, in part, to some opposition from civil society organisations.

	Decree-Law n. 19/93		Decree-Law n. 142/2008		Decree-Law n. 242/2015
	LRPA	PPA	LRPA	PPA	LRPA
State Actors					
Designation					
Restrictions					
Management	p				**
Local Authorities					
Designation					
Restrictions					
Management					
Envi. NGOs					
Designation				*	
Restrictions				*	
Management				*	
Citizens (Local Communities)					
Designation					
Restrictions					
Management					
Land Owners					
Designation					
Restrictions					
Management					

Table 5.4 The involvement of state and non-state actors: local, regional and private protected areas

Notes: LRPA Local and Regional Protected Areas; PPAs Private Protected Areas

(*) NGOs can request the recognition of a private PA as private landowners or managers.

(**) The participation of the National Authority in the elaboration of the management regulation, defining the applicable restrictions and management rules is not compulsory.

(P) The institutional model applied by local and regional PAs created under the 1993 Act, imitated the one required for national PA, with a directive commission chaired by a local authority representative where also sit a member appointed by the National Authority.

Local authorities' involvement in national protected areas

The Decree-Law n. 19/93 established the inclusion of a local authorities representative in the executive commission of each national PA, also including its president, appointed by the Ministry of the Environment and a National Authority official (see Table 5.5). Due to the commission composition and the casting vote of its president, the local authorities' representative did not make a final decision on

management issues, however this model allowed a direct platform for discussion between the three members. The 1993 legislation was a turning point since it also formally recognised the right of local authorities and private actors to propose the establishment of a national PA. It is important to mention that some PAs were previously established as a result of local authorities' requests and NGOs' demands (see in Pinto and Partidário, 2012). Moreover, the Decree-Law stated that spatial plans, compulsory for national PAs⁵⁰ would be elaborated by the National Authority together with competent ministries and local authorities.

	Decree n. 4/78	Decree-Law n. 19/93	Decree-Law n. 136/2007 Decree n. 530/2007
Direction	A <u>director</u> appointed by the State Secretary for the environment under proposition of the NA (among its technicians)	<u>Executive commission (EC)</u> : i) President appointed by the Ministry for the environment under proposition of the NA. He had a casting vote ii) a representative of local authorities iii) a member appointed by the NA Decree-Law n. 221/2002: President appointed by the responsible Ministry and local authorities' legally-binding opinion on the initial EC appointment	A <u>director</u> for each regional <u>department</u> encompassing national PAs and Natura 2000 sites (5 regional departments and a department for wetlands areas) The directors are appointed by the Ministry for the environment
Consultative Bodies	i) <u>General Commission</u> : chaired by the director and composed of local authorities representatives and members of public administrative services ii) <u>Scientific commission</u> : with representatives of cultural and heritage associations, universities, research institutes	<u>Advisory commission</u> : with representatives of scientific institutions, central administration, local authorities and associations for environment and heritage preservation Decree-Law n. 213/97 added representatives of socio-economic activities	<u>Advisory commission</u> (one for each PA): with representatives of the NA, local authorities, environmental NGOs, scientific institutions, members appointed by central administration services Decree-Law n. 78/2015 added representatives of socio-economic activities

Table 5.5 Management structures of national protected areas

Notes: NA = National Authority

Despite these positive developments, it is worth noting that the involvement of local authorities is somehow 'intermittent', and seems to be associated with political cycles and governments' decentralisation agenda. If Decree-Law n. 19/93 allowed for local authorities' involvement in the establishment and management of PAs, Decree-

⁵⁰ Except for nature monuments, see above.

Law n. 221/2002 further empowered local authorities, introducing their legally binding opinion on the initial appointment of the executive commission. The competences of the consultative body were also enhanced as well as the power of the local authorities among their constituent members⁵¹.

A decrease in local authorities' involvement is represented by the Decree-Law n. 136/2007, aiming to rationalise human and financial resources in light of a systematic technical effectiveness increase. This reform took place within the context of a progressive loss of status, financial difficulties and a decrease in the number of technicians from the National Authority, which began in the early 2000s (see Pinto and Partidário, 2012), and which the 2007-2008 global financial crisis worsened. Particularly, the 2007 Decree-Law removed the executive commission of national PAs. It also established the substitution of the president of the executive commission with a regional director who had, and still has, management powers over national PAs and Natura 2000 sites included within the same geographical area. However, each national PA maintains a consultative body with advisory functions⁵² (see also table 5.5).

Moreover, the advisory commission of the National Authority (Decree-Law n. 136/2007) conceived for consultation on the definition of the authority's lines of actions, includes representatives of the national association of local authorities.

NGOs involvement in national protected areas

Contrastingly, the involvement of NGOs in national PAs has been regular. Even if in the 1970 National Act there was no reference to NGOs' involvement, the first National Park included NGOs in its consultative body. In any case, NGOs have had a consultative role in governance arrangements of PAs formally recognised and promoted in national legislation. However, as far as the 2007 reform is concerned, a representative of a

⁵¹ In particular, the act stated that the president would be elected from the representatives of local authorities, and consent of the consultative body would be required to authorise specific activities subjected to conditions, listed in the PA plan. These alterations were introduced according to the administrative decentralisation principle stated by the previous Local Government Act (Law n. 159/99).

⁵² This centralisation removed the more direct institutional channel that allowed local authorities to participate in management decision making. In addition, it strained their interaction with current "regional" directors who were and still are required to address issues related to numerous and eventually heterogeneous PAs due to their regional spheres of competences.

national environmental NGO clarified that: *“It corresponded to a centralisation shift which reduced communication opportunities and channels for NGOs and thus their capacity to influence.”* As part of the civil society, NGOs have also been given the opportunity to express their views through the public hearing process. In addition, since 2007 two representatives of environmental NGOs have been included in the advisory commission of the National Authority.

5.4.2 The decentralisation and privatization processes

Local and regional protected areas

In 1993 local and regional PAs were recognised as alternative governance models to national ones, with the purpose of protecting and sustaining natural, cultural and aesthetic values considered relevant at local level. As pointed out by a National Authority official:

“There was some interest from local authorities to establish and manage protected areas and we (the National Authority) started to realise that we did not have the capacity to be in all of them.”

Regarding the motivations and factors that have facilitated their emergence, another National Authority official specified:

“Why did these local protected areas start appearing? Some of them because of environmental sensibility (...) However, many of them were incentivised by the existence of European Community funding. That is, the EU programs at national level began to be developed in order to recognise a funding increase for the areas integrated into the national network and this led to the emergence of some local and regional PAs.”

Similarly to PPAs, local PAs created and managed by local authorities⁵³ need to be recognised by the National Authority for their integration into the national network.

⁵³ Single local authority in the case of local PAs and an association of local authorities or intermunicipal community in the case of regional PAs.

Importantly, one of the alterations to the Decree-Law n. 142/2008, introduced by the Decree-Law n. 242/2015, clarified that for their integration into the network, local and regional PAs have to receive a positive assessment from the National Authority, which regularly evaluates the maintenance of the preconditions for the designation. Moreover, the law clarifies that local authorities should promote the participation of the National Authority in the elaboration of the management regulation, in order to best ensure the articulation of management plans with spatial plans and other rules applicable in that territory. It is also important to note that the directive commission of local PAs established under the Decree-Law n.19/93, contained a representative of the National Authority. This model, imitating the one at that time for national PAs, was not followed by the more recent local and regional PAs, thus removing a connection between local actors and state actors on this scale.

Private protected areas

The creation of a distinct governance model allowing for the statutory recognition of protected sites managed by private actors goes back to the designation of ornithological reserves, aiming at protecting bird species and introduced in 1979 under the Decree-Law n. 264/79. This designation was an opportunity for landowners before the “non-hunting right” recognition in 2004, which gave them the right to request a hunting ban on their land properties. Nevertheless, just one ornithological reserve was classified (*Refúgio Ornitológico Monte Novo do Roncão*⁵⁴). As clarified by an NGO representative:

“In order to have the protected site recognised it was necessary to present a scientific report, usually done by a competent entity (...) it required an expensive process. It was an administrative obstacle that may explain the lack of candidates.”

Also, the management responsibility rested with the owner of the area, yet depended on the compliance with the regulations defined by the National Authority.

⁵⁴ It was created in 1991 by the Council of Minister Resolution n. 7/91. Its protected status ended in 2011 by force of art. 49 of Decree-Law n. 142/2008.

Successively, the 1993 Decree-Law gave PPAs a slightly different designation. Private landowners could voluntarily propose the creation of a protected site on their land, aiming at conserving species or habitats. After the evaluation by the National Authority, the area would be classified by a national decree as a “site of biological interest”, managed by a policy officer indicated by the landowner.

PPAs are currently regulated under the framework of the Decree-Law n. 42/2008, in particular by the Decree n. 1181/2009. It requires that PPAs’ designation is voluntarily requested by the landowner, an environmental NGO or another legal person under private law (e.g. NGO) the owner has agreed the submission of the application with. Conservation activities planned for the area must comply with the objectives stated by national laws. The National Authority assesses the recognition request based on stated criteria, eventually consulting the local authorities where the requested PPA is located as well as other entities of public administration. If the request is approved, the National Authority monitors the perpetuation of the designation requirements in order to ensure long-term commitment for conservation. In particular, the public-private partnership is enshrined in a protocol defining rights and responsibilities of the National Authority and the private actor.

To date, as referred above, just one PPA has been recognised and integrated into the national network. This is the *Faia Brava* Reserve which was legally recognised in 2010 and is owned and managed by an NGO (see also chapter 7).

Other sites managed by NGOs were incorporated into national PAs or became local PAs. For instance, areas owned and managed by a national NGO (*Quercus*) are part of the *Tejo Internacional* Natural Park⁵⁵, while a site initially managed by an NGO (*Geota*) and a local environmental association (*Pato*) was designated in 2009 as the local natural reserve of *Paul da Tornada*. Few other sites owned by private landowners and managed by an NGO are part of Natura 2000 classified areas. This is the case of the *Castro Verde* Special Protection Area in the *Alentejo* region, where since the 90s LPN has facilitated farmers’ participation in order to foster environmental conservation and sustainable

⁵⁵ Recent developments (2017) in the governance of PAs, include the implementation of a pilot project in the *Tejo internacional* Natural Park, which aims to test a new PA co-management setting involving local authorities, the NGO which owns lands in the park, a local university and a business development association (see Schmidt *et al.*, 2017).

rural development. It is also important to mention the activity of a young association (*Montis*, created in 2014) focusing on private land conservation and stewardship (e.g. post-fire regeneration) which is purchasing land and managing common lands, thanks to crowdfunding strategies, national funding and EU programmes (e.g. for volunteers)⁵⁶.

5.4.3 Public participation in the governance of protected areas

Regarding citizens and local communities, a diachronic legislation analysis shows an increase in the promotion of their direct involvement in all the three governance models of PAs. Decree-Law n. 613/76, already mentioned the consultation of local populations as regards to the definition of the protected area zoning⁵⁷. However, Decree-Law n. 19/93 required a public hearing on the establishment of PAs as well as on the process of adopting the spatial plan, defining permitted and prohibited actions. The involvement of representatives of stakeholders with relevant socio-economic interests in the area was promoted few years later when they were included in the consultative body of each national PA (see also Table 4). Since 2007 they have also been part of the advisory commission of the National Authority.

5.5 Private protected areas: one of the many shades of grey

Our analysis shows that PPAs were recognized as alternative governance model against the backdrop of an opening up of decision-making processes in nature conservation and the emergence of new institutional arrangements for PAs. In particular, the hierarchical state-centred model has been gradually altered by provisions for incremental democratisation (e.g. public hearings) and governance rescaling measures.

This wide-ranging evolution is in line with that of European countries, especially those with a tradition of administrative centralism (Niedzialkowski *et al.*, 2016;

⁵⁶ Montisacn.blogspot.com

⁵⁷ Areas with distinct protection levels according to nature conservation objectives.

Klúvanková-Oravska *et al.*, 2009; Hongslo *et al.*, 2016) and with the global trend for the governance of PAs (Dearden *et al.*, 2005).

The intertwined governance shifts we have mapped have corresponded to a reconfiguration of the Portuguese state role within a multilevel governance context characterized by: i) internal pressures for decentralization; ii) the Europeanisation of decision making processes, along with the existence of EU programmes and funds for non-state actors' conservation projects, requiring institutional changes iii) the existence of multilateral environmental agreements (e.g. the Convention for Biological Diversity-CBD) defining ambitious targets and iv) an international agenda pushing for more inclusive approaches. Note, that the 1992 UN Conference on Environment and Development, where the CBD was opened for signatures, seems to have accelerated the 1993 policy framework regulating and systematising the designation of local, regional and private PAs.

Three considerations should be highlighted, aiming to point out the Janus face of innovative governance arrangements (see Swyngedouw, 2005).

Firstly, as regards the promotion of public participation: whilst the range of actors who can participate in decision-making processes has progressively widened, their involvement has not been deepened likewise. Indeed, consultation stands as the main category for public participation. Besides representing a low level of involvement, consultation is also usually depicted as a top-down exercise that fails to engage most individuals affected. Furthermore, studies have found that participatory approaches are often established to reduce conflict, demobilising dissenting local stakeholders (Cortes-Vazquez 2020; Maestre-Andrés *et al.*, 2018).

Secondly, under the banner of rationalising state resources, a contested recentralisation reform took place in 2007, limiting local authorities' participation in the management of national PAs. The increased distance between local authorities and regional directors raises questions about the lack of representation of local interests in the balance between conservation and local development. Also, local authorities, currently only represented in the consultative bodies of each national PA, may begin

shifting responsibilities regarding definitions of restrictions and obligations rejected by local communities to central government decision makers.

Thirdly, the 1993 policy framework introducing formal partnerships between central state, local authorities and private actors for PAs establishment and management has in part institutionalised existing informal relations between state and non-state actors. The potential pitfalls of these new institutional arrangements will be pointed out below, focusing on our research subject: PPAs institutional arrangements.

To sum up, starting from the 1990s the roll back of state actors has been materialized both in the creation of local and regional PAs and PPAs and (successively) in the regionalisation of national PAs management.

As the drivers for change increase incrementally, the national PAs' management authority seems to be fighting to retain its all-encompassing coordination role, while adapting to the need for increasing competencies and resources as well as to disinvestment in conservation worsened by the austerity policies. Central state downsizing is thus embraced as the sole alternative. This rationale would explain the apparent contradiction between the re-centralisation/regionalisation of national PAs' management and the cession of decision-making rights from central administration to local authorities and private actors.

The mapping of these wide-ranging shifts allows to trace more clearly the genesis of the current institutional arrangement for PPAs. Our study shows that PPAs are not entirely new governance settings in Portugal. Since 1979, opportunities for rural landowners to create hunter-free areas to protect bird species have existed *de jure*. Interestingly, the Decree-Law n. 264/79 of 1 August 1979 adopting the legal framework for the establishment and management of the ornithological reserves, followed of few months the Council Directive n. 79/409/EEC, of 2 April 1979, on the protection of wild birds (known as Birds Directive). This timing suggests a partial alignment with the international and European legislation development on nature conservation before EEC formal accession.

The 1993 framework consolidated PPA model altering the criteria for recognition and their governance structure. Particularly, the “sites of biological interest” would aim

to protect plant and animal species and their habitats. Furthermore, according to the legal provisions, they would be managed by a technical manager appointed by the owner, upon approval of the National Authority. Thus, there was a clear intention of giving to the landowner a leading role, both in the proposal and management of the site, still maintaining national Authority supervision/monitoring.

The public-private partnership relationship has been maintained by the current institutional arrangement defined by the Decree Law n. 142/2008 and regulated by the Decree n. 1181/2009 which defines details on the application, recognition process, management, monitoring actions for assessing the maintenance of PPA status and causes for its cessation (see above, section 5.4.2). As indicated in the decree, PPAs intend to include in the national network of PAs sites with natural values which have, for their rarity, and/or their scientific, ecological, social or scenic value, a special relevance that requires specific conservation and management measures.

Therefore, we can recognize three generations of institutional models for PPAs: the first one aiming at protecting bird species, and the second and third one with a broader conservation purpose enabling the expansion of the PAs national network. Crucially, they can also be distinguished according to the rationales underpinning their *de jure* creation.

Particularly, with regards to the current legal and regulatory framework for PPAs, pragmatic arguments aiming at an efficient reshaping of conservation policies have prevailed, suggesting to frame its emergence within the overarching shift from government to governance. Indeed, as noted above, within a context of decreasing public resources and increasing obligations at international level, partnerships with private actors are claimed to help by mobilising non-state actors' resources. In particular, the professionalization of nature conservation NGOs, that side steps national jurisdiction to find funding opportunities at an international level as key players in making the maximum use of EU subsidies (see also Apostolopoulou *et al.*, 2014) seems a relevant factor in explaining the emergence of the more recent PPAs institutional arrangement. Specifically, it is relevant to highlight that the 2009 regulation explicitly indicates NGOs as key actors, specifying, for the first time, that PPAs recognition may be

“required by environmental NGOs or by legal entity governed by private law the owner(s) has entered into an agreement with (...)” (Art. 2 , Decree n. 1181/2009).

Concurrently, (local) non-state actors are expected to help in trust building to reduce local community opposition. Hence, they are often seen as key agents to bridge the gap with civil society and fill the democratic deficit that has characterized nature conservation interventions.

However, to have a broader picture of the catalysts triggering the recent regulatory framework for PPAs it is crucial to look beyond state actors’ strategies and influences of the international context on them. The 2009 regulation of PPA model, establishing the application and recognition process, followed of one year the 2008 decree-law. The regulation was accelerated by a representative of the NGO which owned and managed the Faia Brava, making use of its networks of contact with policy makers. Such a promotion of the regulating framework suggests a pressing interest of (some) NGOs, and probably of other private actors⁵⁸, in having their area recognized as PPA and integrated in the national network. The proactive role of NGOs and environmental associations, was also patent in the case of the creation of the legal framework for the ornithological reserves with the aim of creating hunter-free areas.

Indeed, the evolution traced so far of PPAs institutional models and rationales underpinning them, reflects in part the transformations of NGOs, currently the key typology of private actors (timidly) participating in nature conservation policy. Put it differently, the changes of NGOs nature, their way of operation and their relationship with state actors go hand in hand with the shift from government to governance in nature conservation policy.

During the authoritarian regime, LPN civil role was limited to environmental education and scientific research for conservation. The transition to democracy, and the agrarian-industrial passage, witnessed the rise of environmental movements acting as agents for social change with radical claims which intertwined nature protection

⁵⁸ Besides the Faia Brava recognition in 2010, the National Authority received in 2012/2013 the application for the creation of a PPA in the southern region of Portugal – Algarve, the *Praia Grande/Lagoa dos Salgados* area, which was owned and managed by a tourism and real estate company. The process of recognition was interrupted also due to the opposition of local environmental associations and NGOs accusing the project of being part of a greenwashing strategy of the company.

requests with political and economic priorities (Barca and Delicado, 2016; Figueiredo *et al.*, 2001). The landscape of environmental associations/NGOs was characterised by a weakness in formal associational culture and “*highly fragmented, multifaceted and individualized style of environmental action and engagement*” (Soromenho-Marques, 2019: 25)⁵⁹. The consolidation around a few environmental organizations acting for nature conservation (and other sustainability goals) was reached during the late 80s and 1990s in a context marked by the accession to the EEC and the articulation of an increasingly polycentric governance for conservation.

Concurrently, the formalization of the relationship with state actors occurred as nature conservation agents and, especially, as regards their partnership for environmental education. Thus, their advocacy role is increasingly combined with the role of service providers, in line with a trend identified at international level (Beer *et al.*, 2012). Furthermore, over the last two decades, a context characterized by a decrease of public national funding and limited national private donations, has privileged NGOs whose professionalization has been directed towards the attraction and access of international funding.

Lastly, it is also crucial to highlight that despite the abovementioned successive alterations of the institutional settings, PPAs have always witnessed a very limited diffusion. In particular, as regards the more recent model, whilst the number of areas owned and managed by private actors for conservation purposes is slowly growing, taking different forms (see section 5.4.2), PPA statutory recognition has proven to be insufficiently appealing. Indeed as mentioned above, so far just one PPA has been integrated in the national network of PAs.

Our interviews point out the administrative burden as the main obstacle for PPAs proliferation, especially as regards the first generations of PPAs. Nevertheless, we may also hypothesise that the absence of a direct financial incentive, together with the necessity of management capacity of the private partner, and stringent long term

⁵⁹ Due to historical contingencies it focused on the anti –nuclear mobilisation, see above (section 5.2.1) (Barca and Delicado, 2016).

criteria for the status maintenance, are restraining PPAs take off - that is, the application of ongoing practices for recognition as PPAs.

5.6 What type of state intervention?

PPAs emergence is emblematic of a restructuring of nature conservation policies. Crucially, our study points to significant trends as regards the shift of state role and brings out questions on how state actors' role *should* be reconstructed.

Our analysis of *de jure* governance settings suggests that while configuring new partnerships with private landowners (or managers), the National Authority seems to have retained its steering role. In particular, it attempts to “govern at distance” (Sørensen and Torfing, 2016) through the definition of criteria for PPAs recognition, that corresponds to PPAs integration in the national system of PAs, and monitoring actions⁶⁰.

It could be argued that thanks to the restructuring of its role, the state has been able to increase its territorial range of authority in areas voluntarily designed by private actors (and local governments). Nevertheless, it is crucial to explore to what extent the new arrangements are able to tackle cross-scale issues, create room for the process of adaptive co-governance (Plummer *et al.*, 2012), and enable an approach for nature *and* people.

The actual steering role of the state, through both more traditional approaches (e.g. monitoring) and enabling actions, should be questioned considering the reduction of resources that has been faced by the National Authority over the past decades, and the demanding and challenging cultural and organisational transformations required.

Furthermore, as regards the shaping of socio-ecological just approaches for conservation, Young *et al.* (2012) emphasise context dependent conditions to achieve successful participatory management. For example, the lack of “participation culture” and power imbalances have been found to reduce the likelihood of socially equitable outcomes (de Vente *et al.*, 2016). This is an issue to take into consideration especially in

⁶⁰ In local and regional protected areas the National Authority retains its coordination role also through its (non-obligatory) participation in the elaboration of the management regulation.

Portugal where public involvement in environmental issues is relatively low (Dias, 2014). Additionally, areas affected by substantial rural depopulation, such as the interior part of Portugal, where many PAs are located (see figure 5.1) will very likely witness a weakening of public involvement.

The next chapters will take up these questions developing a framework to assess PPAs claims and applying it to PPAs practices.

CHAPTER 6. FIT FOR WHAT PURPOSES? A FRAMEWORK FOR ASSESSING THE INSTITUTIONAL SETTINGS OF PPAs IN SOCIO-ECOLOGICAL SYSTEMS

6.1 Introduction

The purpose of the present chapter is to propose an interdisciplinary framework to explore the suitability of PPAs' institutional settings⁶¹ to enhance nature conservation whilst meeting societal needs.

Conceptually, we build on the literature on Socio-Ecological Systems (SESs), incorporating insights from critical perspectives in social sciences regarding exploration into human agency and the understanding of power dynamics to pinpoint the interplays between the ecological and social systems. This approach informs the interdisciplinary diagnostic framework in the second part of the chapter, which draws on the concepts of social and ecological institutional fit, "translated" into assessment criteria based on good governance principles and adapted for PPAs (see chapter 3). Our goal is to propose multiple assessment criteria to provide insights into the suitability of institutional arrangements for PPAs, in order to inform the design of more effective and fit-for-purpose institutions.

Good governance principles are here used as normative guidance for addressing the alignment of institutions with the social context, building on a growing amount of literature (Turner *et al.*, 2018; Turner *et al.*, 2014). Governance, as it is understood here, is about the interactions of actors, power, processes and the way decisions are made and implemented (Graham *et al.*, 2003), in both formal and informal institutions. Formal institutional arrangements influence governance quality, which is both a goal in its own right and crucial for successful nature conservation (Eklund and Cabeza, 2017).

⁶¹ We define institutional settings (hereinafter also referred to as institutional arrangements or models) as the formal institutions that structure social interactions (see North, 1991) and influence human-nature relationships. In the case of PPAs, these correspond to the rules established in law (e.g. law regulating statutory recognition of PPAs), including the property rights regime, as well as the specific norms defined in contracts (e.g. contracts between public actors and the private actor managing the PPA).

Acknowledging the hybridity and multiplicity of PPAs' institutional models we pay special attention to those whose establishment and/or management involve actions by public actors (e.g. in monitoring actions, providing incentives), i.e. PPAs resembling public-private partnerships, that have been so far the object of our inquiry.

6.2 Socio-ecological systems frameworks

Socio-ecological systems (SESs)⁶² are complex systems that are constantly changing due to interactions between actors, institutions, and ecological dynamics taking place across temporal and spatial scales and shaped by social-ecological settings (Berkes and Folke, 1998; Ostrom, 2009). Driven by the urgency to address complex environmental issues, several interdisciplinary research frameworks have been proposed in recent decades. They are distinguished by their theoretical backgrounds, the scales they address and the distinct conceptualisations of social and ecological sub-systems (Binder *et al.*, 2013). Notwithstanding, there are conceptual commonalities:

- a. SESs are *coupled systems* with ecological and social components that reciprocally interact. Each component encompasses numerous dimensions at different scales (e.g. temporal, spatial and jurisdictional).
- b. SESs are *open systems* embedded in broader socioeconomic, political, and ecological settings. Each SES interacts with, and is nested in, other SESs.
- c. SESs are *complex and dynamic systems*. They have broader and narrower scale interactions and the macro-level pattern is not inferred from the behaviour of its components. In particular, numerous system dynamics are characterized by *non-linearity* that hinder the ability to predict SESs responses to change.

Noteworthy, political ecologists, anthropologists and other social scientists have highlighted the pitfalls of some SES frameworks, emphasising the importance of a critical understanding. In particular, they argue that a strong emphasis on the influence of the environment on human behaviour and livelihoods may overshadow the role of

⁶² Socio-ecological systems are also termed as social-ecological systems, human-environmental systems and coupled human and biophysical systems.

social institutions, cultural context and power (Fabinyi *et al.*, 2014; Singleton, 2017). Another critique focuses on the epistemological drawback of implying that governance arrangements are rationally designed in order to solve ecological problems. Studies have revealed that many traditional practices have emerged not from conservation goals, but as a consequence of socio-political and cultural conditions. To exemplify, sacred forests, now labelled as indigenous PAs, were established as places of cultural memory (Chouin, 2002). Furthermore, macro-level perspectives usually underplay differences of interests, power and expectations among social groups and single individuals (Fabinyi *et al.*, 2014). A more refined analysis incorporating power conceptions (e.g. discursive and institutional forms of power), is expected to advance knowledge on the evolution of SESs, disentangling dynamics and contradictions (Coulthard, 2012; Clement, 2013).

Examining SESs from a critical perspective standpoint, we introduce our conceptual framework (figure 6.1). It embraces the human-in-nature perspective, conceptualising human systems as an integral part of the biophysical world. We do not mean to give a full representation of SESs' function; rather an illustration of the main interactions among and within its components.

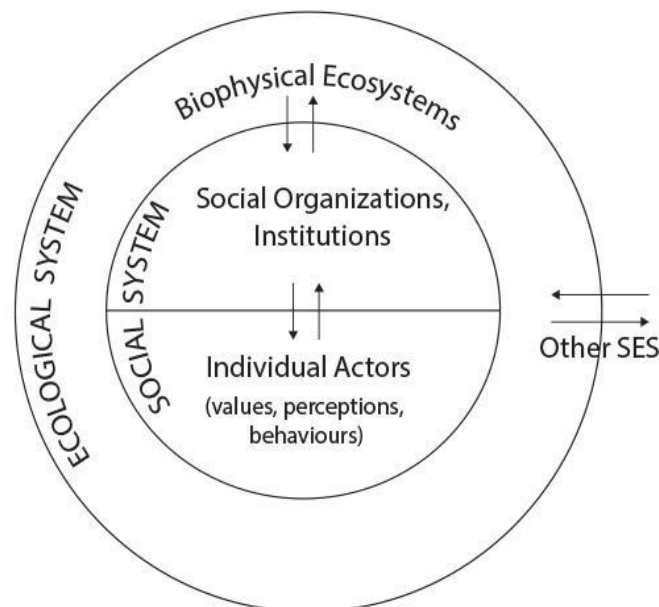


Figure 6.1 Socio-ecological system: a conceptual framework

Source: Based on the SES framework with “humans-in-nature” perspective in González *et al.* (2008).

The social system is understood as multi-scale patterns of interactions between actors and organizations influenced by issues of power (Galaz *et al.*, 2008). The agency of individuals is acknowledged, in complex coevolution with social structures. That is, human agency and social structures are considered mutually constitutive.

In the ecological (sub)system, changes in one component could potentially impact the SES at a higher level. However, the interactions through which this subsystem evolves should be viewed differently in comparison to social systems, in which humans can exercise intentional conscious choice (Farrell, 2007).

Finally, the link between the social and the ecological subsystems is characterised by mutual feedback. All non-human environment has to some degree been shaped by human activity, however it does not remain passive; it also shapes human actions and relations in a feedback loop. A growing body of studies examine the link between nature conservation and socio-economic development exploring, for example, the relationship between human displacements and land use changes (Miller *et al.*, 2012), and the impact of conservation initiatives on the behaviour of actors (Hurst *et al.*, 2013). Adding to this, recent years have witnessed a renewed interest in the study of the agency of animals and organic and non-organic entities (Jones and Cloke, 2008)⁶³.

6.3 Designing fit-for-purpose institutions

In recent years, the application of SES approaches, and related academic debates, have helped incorporating socioeconomic, political and institutional considerations into conservation planning and protected areas designation and management (Palomo *et al.*, 2014). Table 6.1 shows the subsequent (and often overlapping) protected areas paradigms (see also chapter 4).

⁶³ As an example, according to Jones and Cloke (2008: 81) “trees have a capacity to engender affective and emotional responses from the humans who dwell amongst them.”

	Island approach ca. 1872–1980s	Network approach 1990s–mid-2000s	Landscape approach mid-2000s–today	Socio-ecological approach
<i>Type of management</i>	Setting apart areas for the preservation of status quo	Some natural changes are considered necessary	Some natural changes are considered necessary	Adaptive management for resilience to natural and social changes
<i>Type of conservation</i>	Intrinsic values of nature and cultural values	Intrinsic values of nature and cultural values Connection among protected areas	Intrinsic values of nature and cultural values and ecological integrity Management of the surrounding landscape to avoid harming	Intrinsic and instrumental values of ecosystems Integrated landscape management
<i>Local communities involvement</i>	Local communities are seen as a threat	Involvement of local communities (some participatory processes)	Involvement of local communities in decision-making processes	Managed with local communities

Table 6.1 Models for protected areas.

Source: adapted from Palomo *et al.* (2014).

6.3.1 Unpacking the complexity of institutional fit

The mainstreaming of SESs approaches in conservation policies and practices is gaining momentum thanks to the growing literature on institutional fit - the match of institutions (defined as formal and informal rules⁶⁴) with the socio-ecological problems they are meant to address, across temporal and spatial scales and institutional levels (Folke *et al.*, 2007). Greater fit is expected to enhance institutional performance (Epstein *et al.*, 2015). This concept is, thus, of central importance for exploring to what extent nature conservation institutions are effective, viz. fit-for-purpose (Clement *et al.* 2016).

Institutional fit is referred to and used with multiple interpretations. Epstein *et al.* (2015) distinguish three general types of fit in the environmental governance literature: ecological fit, social fit and socio-ecological fit (see table 6.2).

⁶⁴ As explained in section n. 1 (Introduction), our framework will focus on the formal rules, referred as “institutional arrangements”.

Type of fit	Dimensions	Evaluation of institutional match	Examples
Ecological fit	Spatial dimension	Alignment between the territorial scope of the institution and the geographical extent of the ecological issue	Fishing regulation beyond national boundaries
	Temporal dimension	Match of the institution with the progress of the ecological process/issue	Slow regulatory responses as temporal misfit
	Functional dimension	Management considering the linkages among the constituents of ecological systems	Practices for synchronous recovery of predator and prey
Social fit	Institutional acceptance	Social acceptability of rulemaking arrangements given people's expectations and psychological needs	Inclusive decision-making process that reinforces a sense of procedural justice enhancing social acceptability
	Interplay with values and social customs	Alignment of the institution with existing norms and values	Institutions for wildlife management able to support local social practices
	Interaction with scales of social organization	Horizontal and vertical coordination of institutions across space and levels of social organizations	Cross-scales interplays of institutions for coordination and knowledge sharing
Socio-ecological fit	Institutions designed for coupled social and ecological systems	Match of institutional design with social and ecological circumstances in local contexts, associated with a desirable outcome	Higher performance of third-party monitoring of forest commons in intermediate-sized groups

Table 6.2 Types of institutional fit
Source: Based on Epstein *et al.* (2015)

Ecological fit is concerned with the alignment of the institution with the spatial, temporal and functional characteristics of ecosystem issues. In the polycentric and multilevel governance literature, social fit has largely been discussed in the context of governance failures.

Socio-ecological system fit proceeds from the acknowledgement that neither ecological fit nor social fit alone is sufficient to give us a comprehensive account of institutional performance as they focus on just one component of a complex system

each. SES fit tackles more overarching questions: how can institutions be designed so that human and nature can successfully coexist? How can we ensure an emphasis on the dynamic interplays of the components of SESs? To address these questions, scholars have explored how contextual attributes affect institutional performance. Hence, empirical studies have focused on cumulating data on the social and ecological outcomes of an institution, to understand under what conditions it is able to generate a desirable performance (Epstein et al. 2015). The ultimate aim is to properly inform the design of institutional arrangements for the unique combination of circumstances in local contexts.

From a critical standpoint, examining the ecological or social domain (or a single part of either) in isolation is insufficient and misleading. Likewise, the inclination to disentangle variables that interact at different scales in SESs and isolate causal relationships, makes SESs' fit an "*intractable analytical problem*" (Epstein et al., 2015:37). Finally, defining, from a holistic socio-ecological standpoint, a common monolithic goal (e.g. sustainable use of resources; system's resilience) may come at the expense of other criteria within nature conservation policies. In this case, the SES fit approach may fall short of addressing power issues.

We propose to conciliate ecological, social, and socio-ecological system fit, combining their potentialities and attempting to avoid their pitfalls. To tackle the above mentioned issues, we combined the three dimensions within the ecological fit approach (i. ecological, ii. temporal and iii. functional) with the three dimensions of social fit (i. institutional acceptance, ii. interplays with values and social customs and iii. match with scales of social organisation). Our aim is to integrate the evaluation of both ecological and social fit of PPAs' institutional arrangements, without losing the holistic perspective given by the systemic conceptual framework of SESs presented above (see figure 6.2).

Additionally, based on the literature on good governance principles for protected areas, the six dimensions are "translated" into assessment criteria fine-tuned to PPAs features (see chapter 3, section 3.4).

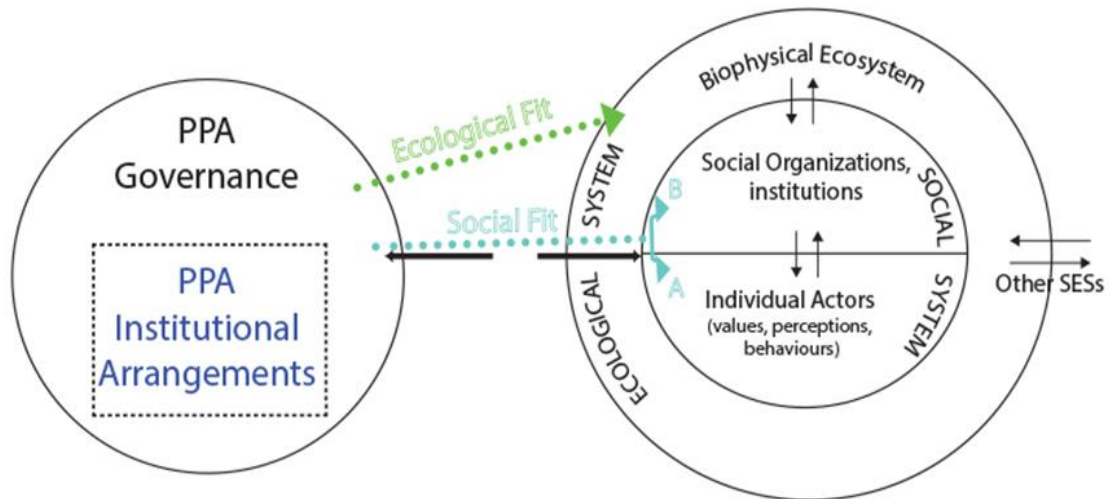


Figure 6.2 The assessment of ecological and social fit of private protected areas

Notes: The governance of PPAs encompasses informal institutions and formal institutions (also referred as institutional arrangements/settings)

6.3.2 Good governance principle as measures of social fit

In the field of nature conservation policies, the shift from hierarchical to alternative approaches seeking the involvement of the private sector, local authorities and local communities, has raised the debate on the suitability of new governance models.

As briefly referred to above, we understand governance as a set of processes, resources, institutions and actors that determine how decisions are made and implemented (Graham *et al.*, 2003); thus, encompassing informal rules and formal institutional arrangements. Whereas, in its prescriptive connotation, governance, *viz.* “good governance”, is about securing the collective interest, since it represents the embodiment of democratic and participatory traditions, grounded in human rights principles.

In particular, Graham *et al.* (2003) suggested a set of good governance principles based on those expressed by the UNDP (1997): (i) legitimacy and voice, (ii) direction, (iii) performance, (iv) accountability and (v) fairness. Conceptual and evaluation frameworks based on slight variations of these principles, to assess the quality of the governance of protected areas, have been successively proposed (see table 6.2).

Graham <i>et al.</i> (2003)	Abrams <i>et al.</i> (2003)	Hannah (2006)	Lockwood (2010)
Legitimacy and voice	Legitimacy and voice	Legitimacy	Legitimacy
Direction	Direction	Direction	Transparency
Performance	Performance	Performance	Inclusiveness
Accountability	Accountability	Accountability	Accountability
Fairness	Fairness	Fairness	Fairness
			Connectivity
			Resilience

Table 6.3 Good governance principles for protected areas

While management effectiveness evaluation is a well established practice, the assessment of governance quality is comparatively recent and does not yet offer a robust body of knowledge for the peculiarities of PPAs. We seek to fill this gap. Bridging the literature on good governance principles for protected areas with the literature on PPAs, we tailor each principle to the characteristics of PPAs, particularly those resembling public-private partnerships (involving state actions).

To outline good governance principles, their multiple facets and connections, we draw on Lockwood (2010) whose innovative work in this field first adopted “connectivity” and “resilience” and removed “performance” as key governance principles⁶⁵.

Legitimacy refers to the acceptance of the governing authority exercised by a public or private actor and the perceptions of the integrity and responsibility with which it exerts power (Graham *et al.*, 2003; Lockwood, 2010). We must however distinguish between input and output legitimacy.

Input legitimacy is conferred by democratic mandate and the processes through which institutions and governing actors are legitimised. For PPAs, land ownerships and resources rights are generally legitimised through their recognition under national or sub-national law. However, customary laws and practices are still relevant in countries

⁶⁵ Lockwood (2010) argued that the capacity of a protected area to achieve its stated objectives (performance) should be assessed as input in a management effectiveness framework and should not be included in the process of the evaluation of governance quality. Put differently, performance intended as effectiveness is determined by, rather than a component of good governance.

where legal recognition of tenure rights is not in place (Stolton *et al.*, 2014). The legitimacy of PPAs' institutional settings, as public private partnerships, is thus usually conferred by legal tools, such as contracts and protocols (ELI, 2003).

Output legitimacy reflects effectiveness and responsiveness, thus, it deals with problem-solving logics. Constructivist scholars highlight the relevance of the communicative ability of governing actors to build consensus (Schmidt, 2013). The output legitimacy of PPAs relates to institutional outputs and the capacity of the area manager to earn community support through performance success (e.g. fulfilment of conservation objectives).

Finally, throughput legitimacy mirrors the inclusiveness of governance processes, and other procedural principles presented below. Participatory processes and communication between managers of protected areas and local communities have been found to enhance the perceived legitimacy of protected areas (Stern, 2008).

Transparency refers to i) the availability of relevant and accurate information and its accessibility; ii) the visibility and clarity of policymaking processes.

It is increasingly recommended that policymaking follows a transparent process grounded in citizens and stakeholders' right to know about matters that affect them (Lockwood, 2010). Along with information on the actors and the decision-making process, the rationale underpinning a specific course of action and the resulting choices made should be readily available and easily understandable (Graham *et al.*, 2003; Lockwood, 2010).

For PPAs, transparency means the accessibility of relevant information on the institutional settings that define the rights and responsibilities of public and private actors. Likewise, data reporting is also likely to motivate landowners to participate in conservation activities (Clements *et al.*, 2016). The accessibility of performance assessment and monitoring (as in the Finnish Metso Programme)⁶⁶ is critical for evaluating whether PPAs continue to fulfil their criteria defined by law as tools for nature conservation. However, it is necessary to strike a balance between burdensome

⁶⁶ <https://www.metsonpolku.fi/en-US> (accessed on 4/02/2020)

reporting requirements and transparency on PPAs' performance so as not to risk undermining their outcomes (Hannah 2006). Similarly, transparency on data reporting may raise concerns regarding the risk of poaching or the location of areas with high natural values, making them attractive for property development (Bingham *et al.*, 2017; Clements *et al.*, 2016).

Accountability encompasses the i) clear and agreed allocation of roles and responsibilities among governing entities; ii) the answerability of governing bodies to constituencies (downward accountability) and to higher governance bodies (upward accountability).

People affected by protected areas should know to who they can report their concerns to resolve issues related to their establishment and management (Zafra-Calvo *et al.*, 2017). A clear assignment of responsibilities is paramount, as constituents have the right to question, and express approval or disapproval of processes, actions and inactions.

In officially recognised PPAs, a clear definition of roles and responsibilities among landowners, managers and state/public actors as parties of the public-private partnership is considered desirable. Legal contracts and administrative instruments convey accountability especially when landowners enjoy tax benefits (Hannah, 2006). Downward accountability in PPAs is multi-layered, as it concerns both the answerability of NGOs (if owner and/or manager) to their members, and the answerability of public actors answerability to their citizens (Lockwood, 2010).

Inclusiveness refers to the opportunities that actors have to participate and influence decision making. Inclusive public participation is equally about democratizing and legitimising the decision making process and improving its quality and effectiveness by incorporating different views (Stoll-Kleemann, 2010).

According to Silva *et al.* (2015) participation should occur from the early stages, to avoid a mere validation of decisions, and should promote the engagement of marginalised actors who usually bear the costs of conservation. Effective inclusiveness can occur through diverse formal processes and informal interactions (Armitage *et al.*, 2012).

For PPAs, inclusive governance is necessary to address rising concerns and resistance from local communities related to conservation grabbing (Ladle *et al.*, 2014), that is the transfer of control over land and resources from local to outside actors for conservation purposes (Holmes, 2014).

To illustrate, a process promoting consultation between the public entity responsible for designating PPAs and the local authorities where the requested PPAs is located, as provided by the Portuguese legislations may help to enhance inclusiveness.

Fairness concerns i) the equitable distribution of costs and benefits; ii) the recognition of stakeholders' cultural values, views and identities; iii) the recognition of the intrinsic value of nature.

Different criteria for distribution can be applied. For example, the egalitarian criterion requires costs and benefits to be shared equally among stakeholders. Costs and benefits can also be distributed according to needs, privileging the most vulnerable, according to the costs borne or to the efforts made to attain conservation goals (Pascual *et al.*, 2010).

It is noteworthy that, the concept of fairness is dynamically and contextually constructed (Martin *et al.*, 2016). This requires recognition for individual and communitarian notions of social equity and fair compensation (Schokkaert and Devooght, 2003). It is also crucial to acknowledge that issues of unfair resource distribution and material harm are closely linked to questions of cultural misrecognition; these two concerns should be properly addressed in an integrated way (Fraser, 2000; Martin *et al.*, 2016). Consequently, criteria to evaluate the fairness of PPAs deals with the perceptions of winners and losers and considers both aspects: economic distribution with social and cultural recognition.

In PPAs, land use and access to resources is not controlled from above; the landowner decides to apply restrictions and may voluntarily implement actions for conservation. This is expected to avoid issues related to social justice associated with exclusionary top-down approaches. Nevertheless, the existence of funding or economic incentives for the promotion of PPAs may raise issues of distributional fairness. Moreover, conservation grabbing can be socially harmful once it triggers tensions and

local conflicts due to the benefits reaped by outsiders or powerful elites (Fairhead *et al.*, 2012; Holmes, 2014). Conservation may also be a driver for the privatisation of publicly owned resources or common lands and shared resources. It may also cause the consensual yet not fully voluntary sale of land due to economic necessity (Edelman *et al.*, 2013 *apud* Holmes, 2014).

Remarkably, following the adoption of the Aichi target 11 from the Convention of Biological Diversity, which promotes the objective of equitable management for PAs, a three-dimensional definition of equity has been widely accepted. It encompasses i) procedural equity concerned with how decisions are made ii) recognition and consideration of social and cultural diversity and of stakeholders views, iii) the distributional aspect (Zafra-Calvo *et al.*, 2017). Thus, a parallel can be easily drawn: while the first dimension is linked with the procedural aspects of legitimacy, accountability, transparency and inclusiveness, the second and the third are included in the fairness principle of the proposed framework.

Connectivity encompasses i) connections and coordination between and across all institutional levels ii) the combination of policy instruments for nature conservation and other public policies (e.g. agriculture and tourism).

SEs and landscape approaches to conservation acknowledge the need for connectivity between actors to increase information sharing, trust building and to address shared problems (Brondizio *et al.*, 2009). Indeed, it is widely accepted that each PA, public-led or private, should not be managed in isolation. Networks of protected sites and transboundary PAs are examples of cooperation efforts. However, the homogenisation of norms, knowledge and preferences, that characterises highly connected contexts, can also be detrimental, e.g. leading to the reduction of actors' explorative ability and adaptive strategies (Bodin and Norberg, 2005). Additionally, the need to design a portfolio of conservation policy options that overcome sectoral approaches is increasingly recognised (see Doremus, 2003).

Consequently, this criterion can be assessed by evaluating both i) the effective inclusion of PPAs in a nature conservation policy portfolio in conjunction with other policy instruments (e.g. inclusion in national and/or regional strategies) and ii) the

coordination of PPAs with other institutions existing in the same area (e.g. spatial plans for the protection of cultural heritage).

Resilience refers to the capacity of a governance system to cope with changes. It is strongly associated with the concept of adaptive governance in resilience scholarship. Adaptive governance is defined as having the capacity to manage complex cross-scale relationships between the social and the ecological, to cope with and adapt to unexpected changes and unpredictable feedback (Folke *et al.*, 2005) and/or to allow a reconfiguration that permits the maintenance of SES functioning.

According to Lockwood (2010) adaptive governance systems for the resilience of PAs requires an institutional design able to i) reconcile institutions that provide long term security and direction (e.g. legislations) with the flexibility necessary to respond to new dynamics ii) acknowledge uncertainties related to complex SESs and implement strategic planning in order to reduce risks and guide opportunities iii) facilitate the assimilation of new knowledge for decision making (e.g. through monitoring and evaluation). Dietz *et al.* (2003) emphasise the crucial role of inclusive dialogue, supported by formal and informal social networks, for information sharing and improving response diversity. The creation of a formal coordination panel or the promotion of networks between private landowners and other stakeholders (see for example the Finnish Metso Programme) are expected to enhance the resilience of PPAs.

Having outlined the set of good-governance criteria, it is important to note that a growing body of literature has demonstrated that the governance of PAs affects their effectiveness and, more broadly, social and ecological outcomes (Eklund and Cabeza, 2017). Accordingly, good-governance principles have an ambivalent nature. Firstly, they are considered important *per se*, as far as they embody ideals of democratic traditions and human rights. As policy instruments for the protection of a common good, PPAs have a particular responsibility to bear going beyond the interest of property rights holders, and concerning the rights of present and future generations (Pieraccini, 2015). Secondly, adherence to good governance principles is also expected to be instrumental to effective outcomes (Dawson *et al.*, 2018). For example, perceptions of inequity may undermine conservation efforts, reducing institutional acceptance and the level of collaboration from local communities (Pascual *et al.*, 2010). Thus, procedural and

substantive rationales for the fulfilment of good governance generally overlap with instrumental approaches. Consequently, it has been argued that the perception of good governance principles, such as legitimacy, transparency, accountability and inclusiveness, as well as the match with the principles of connectivity and resilience, may provide an indication of the social fit of governance arrangements (Turner *et al.*, 2018).

6.3.3 Ecological fit

Improving the ecological fit is a key concern of conservation scientists, requiring institutions to align themselves with the spatial, temporal and functional dimensions of the ecological system. Regarding PPAs, the spatial dimension concerns the match of their territorial scope (in terms of location and covered area) with the conservation issues intended to be solved. The size of PPAs is generally smaller than other protected areas (Stolton *et al.*, 2014). Whilst this is not a problem if the PPA is intended to protect a local habitat, concerns may arise in the case of more ambitious management goals, especially if the PPA is not well connected with other protected sites. Do formal institutions promote or hinder a location that improve spatial fit? For example, do they encourage PPAs' connectivity with other protected sites, e.g. requiring them to be situated on the boundaries of existing public protected areas? (Stolton *et al.*, 2014). Furthermore, it is important to assess whether the criteria for statutory recognition favour PPAs which protect endangered ecosystems and species, or, conversely, a lack of systematic conservation planning makes their position towards less threatened places more likely (Ladle *et al.*, 2014; Margules and Pressey, 2000).

The temporal dimension of ecological fit refers to the match of the governance systems' responses to an environmental problem (Epstein *et al.*, 2015). Slow regulatory responses or the short-term time frame of decision-makers have (due to election cycles) are widely recognized as emblematic examples of temporal misfit; indeed, they lack the rapidity of action and the long time span required to tackle sustainability issues (Munck af Rosenschöld *et al.*, 2014). Regarding established PPAs, the crucial issue is the length of the protection they provide. According to IUCN guidelines, PPAs "should demonstrate an intent to conservation 'in perpetuity', or at least 'long-term' (a period of at least 25 years)" (Stolton *et al.*, 2014: 10). Consequently, provisions for long-term contract or conservation easements recorded in the title of land, coupled with monitoring actions,

are expected to improve temporal fit. Indeed, well designed long term contracts are intended to make conservation interventions less dependent on the electoral cycles. Also, the continuation of the PPA status, or the conservation intent of the private actor, should be ensured in case of changes to ownership (Mitchell *et al.*, 2018).

The functional dimension concerns the suitable management of interlinked constituents of the ecological system (e.g. predators and prey) (Epstein *et al.*, 2015). Monitoring actions to assess progress made in management goals and widely available technical support from public actors may be crucial to enhance the management capacity of private actors. The ecological fit dimension is highly intertwined with the resilience principle. In particular, in order to suitably address the ecological dimensions, private actors should ensure they have scientific and technical capacity, as well as the appropriate resources and motivations to fulfil conservation objectives. Over time, these attributes may lessen due to a reduction in private funding, or may fail to address increasingly demanding management goals while confronting, for example, new ecological threats. Therefore, compliance monitoring and the public support for private actors are expected to improve the institutional fit (see e.g. Fitzsimons, 2015).

6.3.4 The diagnostic framework

Table 6.3 operationalises social fit through good governance principles, in order to facilitate their analysis. The principles of legitimacy, transparency, inclusiveness, accountability and fairness are indicators of the dimensions of social fit that deal with institutional acceptance and, more broadly, with stakeholders' values. Connectivity and resilience are instead linked dimensions concerning the fit between institutions and temporal, spatial and jurisdictional scales of social organisations.

The three dimensions of ecological fit (see table 1) are also integrated into the framework with the aim of providing a multi-tiered interdisciplinary tool. The growing body of literature on PPAs has allowed us to develop tailored criteria for their assessment, relating especially to their nature as co-governance arrangements between public and private actors.

		Good Governance Principles	Definitions	Criteria for PPAs assessment
SOCIAL FIT	A · Institutional acceptance · Interplays with stakeholders values and customs	LEGITIMACY	Acceptance of the authority of an institution to govern · <i>Input legitimacy</i> : e.g. conferred by the democratic mandate · <i>Output legitimacy</i> : acquired through effectiveness and responsiveness	· Perception of PPAs institutional arrangements' and of public and private actors' input and output legitimacy
		TRANSPARENCY	· Availability and accessibility of information. · Visibility and clarity of policy-making processes	· Satisfaction regarding the availability of contracts, reports and information on policy -making processes
		INCLUSIVENESS	· Opportunities to participate in and influence decisions	· Perception of opportunities for the effective participation of stakeholders
		ACCOUNTABILITY	· Clear and agreed assignment of roles and responsibilities · Answerability of governing bodies to constituencies and higher governing bodies	· Perception of clear definitions of actors' roles · Perception of private actors' answerability to membership and public actors' answerability to citizens
		FAIRNESS	· Equitable share of costs and benefits · Consideration of social and cultural diversities	Perception of economic distribution (e.g. incentives, land grabbing, changes in local livelihood) and socio-cultural recognition
	B · match with scales of social organization	CONNECTIVITY	· Coordination within and between levels of PA governance · Articulation with other policy instruments for conservation and other public policies	· PPA connectivity with other PAs in national and international networks · The inclusion of PPA governance and management within e.g. agricultural, tourist policies
		RESILIENCE	· Conciliation of long term security with institutional flexibility to respond to new dynamics · Management of threats, opportunities and risks · Assimilation of new knowledge	· Long term security of nature protection · Monitoring and evaluating processes in place · Organizational flexibility · Processes for new knowledge assimilation
ECOLOGICAL FIT	SPATIAL DIMENSION	Congruence between the geographical extent of ecological issues and the territorial scope of the institution	Match between the PPA's location and the extent of the ecological issue	
	TEMPORAL DIMENSION	Match of the activation of institutional responses to an environmental problem	Match between the temporal length of the legal tool and time needed for conservation actions	
	FUNCTIONAL DIMENSION	Management of interlinked ecological system constituents	Interdependent management of ecological system constituents	

Table 6.4 The diagnostic framework

Finally, it is important to note that applying good governance criteria as benchmarks may be perverted as a technocratic exercise distracting from “*how an output is achieved (...) to ask whether the outcome has been achieved.*” (Jenson and Levi, 2013: 74). To avoid an apolitical approach it is crucial to incorporate power, normative issues and the variety of values on which democracies depend (Dahl and Soss, 2014). Consequently, when assessing the social fit of a PPA (Part A), it is crucial to perform context-dependent validations of each of the principles and to pay special attention to the stakeholders’ perceptions.

6.4 Concluding remarks

The aim of this chapter was to inform the design of an assessment tool that would detect to what extent the institutional settings of PPAs enable their match with the connected dimensions of social and ecological fit. The interdisciplinary framework proposed is grounded in the theoretical and empirical research on social and ecological system fit and on the principles of good governance for PPAs. To sum up, we highlight the following potentialities as a diagnostic tool:

- a. Underpinned by a conceptual framework of SESs, the tool is designed to take into account i) the core features and multi-dimensional dynamics of human-environmental interactions and ii) the co-evolutionary relationship between institutions and contextual settings.
- b. This multi-criteria approach, which incorporates ecological and social fit dimensions, allows us to identify areas of poor performance and to negotiate choices around trade-offs.
- c. By avoiding absolute definitions, each (social) principle can be operationalised on a context-dependent basis, incorporating different values and views.

Achieving a perfect institutional fit is in practice an elusive task due to the complexity of SESs, the limited research available and the existence of multiple (often conflicting) objectives. Indeed, some scholars prefer to prioritise a more realistic management of mismatches (Keskitalo *et al.*, 2016). Under these circumstances, the

proposed framework could be evolved to support complex decision-making and help to design more appropriate institutional models that are adaptable to dynamic settings.

In the following chapter, we will test it to assess to what extent current Portuguese PPAs formal institutional settings are able to support PPAs social and ecological fit.

CHAPTER 7. ASSESSING THE SOCIAL AND ECOLOGICAL FIT OF PRIVATE PROTECTED AREAS: THE CASE OF FAIA BRAVA

7.1 Introduction

The assessment of conservation management, which foregrounds ecological objectives, has been so far the main focus of analysis as regards protected areas and regulations for nature conservation. Nonetheless, governance analyses have begun to privilege a systemic perspective by considering complex human-nature interactions. This standpoint allows us to deeply explore the combination of social and ecological suitability of PPAs, within a context where the reconciliation of nature conservation with socio-economic development is gaining momentum.

The main aim of this chapter is to test the novel diagnostic framework developed in the previous chapter, to assess the social and ecological fit of the institutional settings of PPAs. The Portuguese PPA of Faia Brava is our case study. Our analysis also contribute to fill the gap, that we observed in the literature, regarding empirical studies on PPAs' practices.

Two connected research questions will be addressed: i) *To what extent are current Portuguese PPAs institutional settings able to address social fit and ecological fit?* ii) *Under which conditions?*

7.2 Setting the scene

7.2.1 The regional context: farmland abandonment and rural depopulation

The PPA of Faia Brava is located in the Côa Valley, a remote area in the north-eastern part of Portugal (see figure 7.1). Since the 1950s, the region has been characterized by rural depopulation, farmland abandonment and the withdrawal of other traditional activities such as grazing. These linked phenomena, common to other rural and remote areas in Europe and in other high-income countries (Navarro and Pereira, 2015; Queiroz *et al.*, 2014) have been mostly driven by a combination of: i)

socio-economic factors, encompassing remoteness from market, employment opportunities and services and reduction of farm income, ii) population aging, iii) soil depletion and iv) orographic factors such as high slopes, which hinder the use of farm machinery (Leal Filho *et al.*, 2017).



Figure 7.1 The location of the Natural Reserve of Faia Brava
Source: Adapted from De Silvey and Bartolini, 2018

Land tenure is another relevant aspect in Portugal, where the 97,3% of the territory is under private ownership (Beires *et al.*, 2013). This is particularly important to consider as regards the region where the Faia Brava is located, characterized by small

parcels and by a lack of a comprehensive land registry system. Hence, the lack of cadastral data of rural land ownerships is pointed out as one of the main challenges faced by planning policies, land management and conservation actions (especially those aiming at purchasing lands).

The implementation of rural development policies (e.g. subsidies of the Common agricultural programme such as those paid to farmers in Least Favoured Areas) and rural repopulation programs (e.g. “New Populators” programme, see Sá, 2017) has not been sufficient to slow down the trend of land abandonment in the region. This is in line with existing model projections which suggest higher levels of farmland abandonment in European marginal areas over the next 20 to 30 year (Terres *et al.*, 2015).

Even though the reduction of marginal agricultural areas may be an opportunity for the natural regeneration of non-agricultural native habitats (Leal Filho *et al.*, 2017; Queiroz *et al.*, 2014), land abandonment is commonly associated with environmental issues such as an increase of fire risk due, for example, to the creation of large areas of shrubland. Also, the conversion to animal husbandry may lead to the increase of pastoral burning practices, led by shepherds to maintain habitats for grazing (Fernandes *et al.*, 2013). Additional environmental concerns regard the loss of biodiversity and the reduction of landscape heterogeneity associated with the abandonment of extensive farming systems. In order to tackle these threats, it is growingly recognized the crucial role of active management interventions.

7.2.2 A new model for nature conservation

The Faia Brava Natural Reserve was created in 2000 by ATN (*Associação Transumância e Natureza*- Transhumance and Nature Association) an environmental NGO that has managed and expanded it since then. ATN was founded in 2000 in Figueira de Castelo Rodrigo (see Figure 7.1), with the main aim of protecting natural spaces through land acquisition and management.

The founding members of ATN are biologists and naturalists, who had been studying the bird fauna in the area for many years. Their initial purpose was the

preservation of the cliff-breeding bird fauna⁶⁷ in a stretch of the Côa Valley characterized by a steep canyon (see figures 7.2 and 7.3).



Figure 7.2 The Côa Valley



Figure 7.3 The Natural Reserve of Faia Brava

ATN's creation was prompted by the promotion of local civil society organizations, for environmental protection and management, pursued by the then direction of the Douro International Natural Park⁶⁸, situated few kilometres east from the reserve. Particularly, the kick-start of ATN experience was the opportunity to put into action a project for birds' conservation.

Furthermore, the connection of the members of ATN with international conservation organizations (World Wildlife Fund - WWF, Fonds d'Intervention pour les Rapaces and MAVA Foundation) played a significant role in the implementation of the first conservation project, thanks to the technical assistance and funding - for the purchase of parcels of land - they provided to the Portuguese NGO (ATN, 2010). It is important to highlight that a considerable share of donations still originates from outside Portugal, mainly from the Netherlands (Disselhof, 2015).

Table 7.1 synthetizes the main steps related to the development of the natural reserve of Faia Brava and to the recognition, of a part of it, as the first PPA in Portugal. As referred above, the acquisition of land to create the natural reserve, originated

⁶⁷ In particular, vultures and eagles (e.g. Bonelli's eagles and Egyptian Vulture).

⁶⁸ Personal communication.

around the necessity of protecting the nesting sites of cliff-breeding birds. In order to favour the persistence of the threatened birds, an early key conservation action has been the maintenance of cereal farming (e.g. rye, oat, wheat). Together with olive and almond groves, they were the features of the past cultivated area, which also (still) hosts cork oaks and holm oaks.

Successively, ATN has then gradually embraced a more holistic strategy aiming at integrating ecological restoration and sustainable land management. This development has been triggered by the fires events that severely damaged the reserve in 2003 and 2005 (see also Jepson *et al.*, 2018).

In 2010, 214 hectares were classified by the National Authority responsible for conservation policies as Private Protected Area; the first protected area in Portugal integrated in the national network, managed by an NGO.

The natural reserve currently covers a total area of 856 hectares⁶⁹. ATN aim is to keep expanding the area through the purchase of additional lands using an acquisition fund, consisting of donations and NGOs profits (e.g. sale of local products and land rental for beekeeping).

The PPA lies inside the Côa Valley Special Protection Area (EU Natura 2000 network), established in 1999 (Decree Law n. 384-B/99), and IBA (Birdlife International Important Bird Area). Furthermore, it also lies within the boundaries of the Côa Valley Archaeological Park. The park has open air engravings, classified as UNESCO World Heritage Sites in 1998, which mainly depicts ancient local fauna (goats aurochs, horses and deer) dated from the Upper Palaeolithic (Luís and Garcia Diez, 2008).

It is important to note that starting from 2011 the Faia Brava was integrated, as a pilot area, in the Rewilding Europe network. The recent, and contested, rewilding discourse is gaining momentum, both in academic debate and public discourse, as an alternative biodiversity conservation strategy (Lorimer *et al.*, 2015; Jepson *et al.*, 2018). In particular, the aim of the Rewilding Europe project, launched in 2000 and originated in a Dutch context, is to reconstitute, in an artificial way, wilder ecosystems through the

⁶⁹ This correspond to the “intervention area”, of which 650 hectares are owned by ATN (retrieved from www.atnatureza.org)

recovery of selected populations and natural processes and/or the (re)introduction of species⁷⁰. The introduction of semi-wild garrano horses and maronesia cows in the Faia Brava reserve is presented as part of the rewilding approach (DeSilvey, Bartolini, 2018). The grazing role of these large herbivores is considered promising for reducing biomass and consequently decrease the incidence and intensity of fires. Concurrently, their presence is strategically linked with the development of nature-based tourism practices (Pellis, 2019).

Years	Main conservation activities	Land acquisition and management	ATN Main Funding
2000-2003	Conservation project for the Egyptian vulture and Bonelli Eagle	Aquisition of the first 67 ha of land	MAVA foundation
2004-2009	Nature conservation actions (e.g. grains and extensive livestock farming) Recovery of burned areas Sustainable forest management Actions for raising environmental awareness, dissemination	Acquisition of additional lands and management of some areas in the buffer zone Participation in the Forest intervention area (ZIF)	National and international private donations, Revenues from the sale of local products and services Agri-environmental payments Grants
2010-2020	Recognition of the PPA (2010) Nature conservations/rural development actions Sustainable forest management Professional training Environmetal education	Acquisition of additional lands participation in ZIF	Donations, memberships, Crowdfunding campaigns, European funds (Life Programme) Sale of local products Revenues from nature-based tourism activities Agri-environmental payments

Table 7.1 Faia Brava: management interventions and funding

Sources: ATN (2010), www.atnatureza.org, interviews

⁷⁰ See: www.rewildingeurope.com

7.3 Methods

Assessment against the criteria presented in the previous chapter was undertaken using a qualitative methodology (Lockwood, 2010). Particularly, we analysed data obtained from secondary sources, interviews and fieldwork observation by using the framework developed to diagnose the social and ecological fit of PPAs' institutional settings.

Literature review was conducted covering academic research and grey literature (e.g. reports, newspaper articles, internet resources and promotional material) on the Faia Brava and on the socio-economic aspects of the region where it is located. In addition, data were collected during the workshop "Do Private do it better?", that was held on the 8th of September 2017 as part of the Europark Conference, in Arouca, Northern Portugal.

Desk study was complemented by ten semi-structured interviews that were conducted in 2018 with founders of ATN and members of ATN governing board (2), two ATN employees (2), conservationists (2), a representative of the National authority responsible for nature conservation in Portugal (1), an officer of a local authority responsible for civil protection (1), a local entrepreneur (1) and an archaeologist of the Côa Valley Archaeological Foundation (1).

The list of questions and topics to be covered by the interview (see Appendix II) aimed to retaining a focus on the multiple criteria of the diagnostic framework (see chapter 6, table 6.4). However, during the interviews the questions were openly framed enabling other questions to arise spontaneously; this strategy aimed to gain a deeper understanding on specific aspects. Also, the first part of the interview to ATN founders and employees focused on the creation and development of the NGO.

Interviews lasted between 40 minutes and one hour. They were tape recorded and selectively transcribed coding the segments identified as relevant for the analysis. Five interviews were conducted in Castelo Rodrigo, this allowed the research work to be informed also by fieldwork observation. This was undertaken in May 2018, for one week and enabled to gain a deep understanding of the dynamics in place in the region where the Faia Brava reserve is located.

7.4 Detecting mismatches

7.4.1 The social fit

Legitimacy

The legitimacy of the institutional arrangement is conferred by the recognition of the area by the National Authority and its integration in the national system of protected areas through the Administrative Act (*Aviso*) n. 26026/2010. The statutory designation of Faia Brava as PPA *“has changed a lot the perception (in positive N/A) local authorities representatives had about the project”* (Interview- ATN employee).

In order to have a broader picture, it is also crucial to explore the acceptance of non-state-actors authority taking into consideration the informal sources of legitimacy of ATN. In this regard, a fire that took place in the natural reserve at the beginning of ATN operations in the region and started by a shepherd, with whom ATN was collaborating, is illustrative of the existence of a social tension. This hinges upon the clash between two competing claims i) the ATN conservation strategy, causing restrictions on human activities and ii) traditional land use practices that use burn methods to improve grassland to graze sheeps (see also Pellis, 2019). This event preceded PPAs recognition, however, it suggests that the conservation initiatives conducted by ATN may have been perceived, by a part of the local community, as imposed from the outside.

A more nuanced understanding of the emergence of such tensions is suggested by Leuvenink (2013). She pointed out that when ATN began to buy lands to create a natural reserve, the National Authority also started to have some presence in the same area because of the implementation of the EU Bird Directive. This coincidence may have caused a confusion on the organization to blame for restrictions on human activities. This note also suggests a low acceptance by local communities of the authority of the centralized state actor responsible for national nature conservation (the National Authority), an aspect that may contribute to undermine the legitimacy of PPA institutional setting.

On the other hand, a relevant facet that has emerged from several interviews refers to the recognition of ATN, as an actor that both owns and manages the area, as

ideal steward of natural resources. The direct relationship of the actor with the managed land contrasts with the case of a state/public management of private lands. This is, for itself, considered source of legitimacy since it simplifies the implementation of the management plan. In the words of a local entrepreneur: *“This makes the interventions easier because everything coincides”*. This dimension can be conceptualized as “expected output legitimacy” since it refers to an expected performance. Also, it focuses on the ecological outcomes.

Furthermore, output legitimacy of ATN is also expected to be reinforced by the take up of a nature-based economy. This expectation is mostly driven by the eco-tourism potential of the rewilding activities in the Faia Brava Reserve. These have encompassed so far the reintroduction of semi-wild animal species and the financing of eco-tourism accommodations such as the StarCamp, a safari-style camp (see also DeSilvey and Bartolini, 2018; Pellis, 2019). In addition, ATN base in Figueira de Castelo Rodrigo is often invoked by ATN members as a way to revitalize the economy of the region in particular, as referred by an ATN staff member and a Municipality officer, thanks to PPA’s *“capacity in attracting tourists, young and international volunteers and students.”*

Transparency

As regards the availability of information on the Faia Brava, the administrative act that has recognized it as a PPA⁷¹ (Aviso n. 20026/2010) and the PPA management plan are easily accessible on the website of the National Authority. These documents are also available at National Authority and ATN’s main office. The website also provides downloadable version of national legislation related to PPAs and an application form for starting the recognition process.

The National Authority’s webpage on the Faia Brava presents the biological characterization of the area, information on activities that can be undertaken by visitors

⁷¹ As regards the motivation for the Faia Brava recognition as PPA, the act states that *“natural values that occur assume, due to their rarity, scientific and ecological value, a particular relevance which justifies its recognition and integration in the national network of protected areas.”*

(e.g. birdwatching) and a readily available summary of the main goals set out by the management plan⁷².

Interviewees did not point out any concerns about transparency. However, two issues should be considered. Firstly, the PPA management protocol between ATN and the National Authority- enshrining the public-private partnership and defining rights and responsibilities of the parties- is not available online. However, for the purpose of this research, it was easily accessed by requesting it to an officer of the National Authority. Secondly, studies focusing on the rewilding actions, have referred that silence has been sometimes used by ATN as a strategy to avoid conflicts with “distrusting” local residents (Pellis, 2019; Leuvenink, 2013).

Inclusiveness

Since ATN is a state partner in implementing a national public policy, whose effects go beyond local reach, we intend “stakeholders” as encompassing both local communities and national citizens.

The Portuguese legislative framework has taken on board the widespread call for enhancing stakeholders’ participation in decisions affecting them. Indeed, the Decree n. 1181/2009, which regulates PPAs, promotes, during the recognition process, the consultation between the National Authority and the local authorities where the requested PPAs is located. Nonetheless, in the case of Faia Brava the two Municipalities where the area is included (Figueira de Castelo Rodrigo and Pinhel) were not formally consulted by the National Authority. However there was an informal set of meetings with the municipalities led by the PPA promoters/ATN.

As regards the direct participation of citizens, the involvement of local communities is part of ATN mission. However, inclusiveness seems to be declined by ATN mostly as involvement of citizens in information activities, volunteers works, conservation camps and school visits, aiming at enhancing, especially among local

⁷² <http://www2.icnf.pt/portal/ap/amb-priv/app-faia-brava> (accessed on 15/02/2020). Notheworthy, alongside conservation actions (eg. Preserving and recovering agricultural biotopes, increasing the diversity of threatened vertebrates) the plan lists actions aiming at improving scientific knowledge on the ecological characteristics of the area and the number of ATN members as well as PPAs’ visitors.

population: i) people understanding of biodiversity value and its relationship to human well being and ii) the support of ongoing conservation activities. As an illustration, the ECOA project, an environmental educational programme whose goals is to increase the knowledge of natural heritage of the Côa Valley, involved in 2017 the students of the schools of Figueira de Castelo Rodrigo. This project is also an example of cooperation between the ONG and local actors.

The strategy, that seems to focus both on cognitive knowledge and moral aspects, responds to an issue frequently raised by people working for, or within, the reserve. As an example, a local entrepreneur declared *“Local people usually do not understand what the philosophy of the Faia Brava’s project is (...) For this reason, it is important to show, especially to young generations, the importance of the project and its motivations”*.

The efforts concentrate on public awareness and have not yet fully promoted public participation in decision-making. However, a founder of ATN stressed that: *“stakeholders’ involvement is an everyday practice, daily undertaken to implement the activity plan of the organization”*. Additionally, as regards the engagement of local actors in the definition of the future management plan of the Faia Brava, he made clear that it is not a legal obligation and, although also relevant for improving the local recognition of their conservation actions, it should be weighted with a pragmatic approach. In his words, *“From my own experience, a more strategic actors’ inclusion makes the processes more complex. We should be pragmatic: it is better to have an efficient management plan (without effective stakeholders inclusion, N/A), than no plan at all.”*

Accountability

The provisions of the Decree n. 1181/2009 and those of the management protocol signed in 2010 between the National Authority and ATN, clearly state their respective roles and responsibilities. Specifically, ATN undertook to submit an annual report on the implemented management activities, and related impacts, to the National Authority and to signal the PPA. In order to ensure long-term commitment, the National Authority assesses, at least every three years (Clause n. 4 of the protocol), the perpetuation of the designation requirements. These are indicated in the Decree n.

1181/2009 and primarily include the implementation and fulfilment of the management plan in view of the preservation and enhancement of biodiversity and ecosystem services.

No national funding mechanisms has been yet implemented for supporting the management of PPAs, nor for the purchasing of lands for conservation purposes. Tax reliefs apply for individual and corporate donors; they can partially subtract their donations to ATN from taxable income (see Disselhof, 2015). Therefore, the benefit of PPA designation essentially lies in the increased visibility of the area and of the conservation activities of ATN. The absence of direct public funding seems to explain the essential content of the protocol, that counts nine clauses and, more relevantly, define few rights and obligations for the parties, mostly focusing on reporting and monitoring requirements.

The interviews did not point out any issues regarding ATN answerability to its membership. However, as regards the perception of public actors' answerability, it is important to note that the National Authority has been traditionally seen as a distant actor undertaking a challenged regulatory role. Furthermore, the 2017 reform has been criticized for increasing the distance between local communities and representatives of the National Authorities (see chapter 5).

Fairness

PPAs in Portugal do not receive any *ad hoc* public funding. For this reason, the main issues regarding fairness do not primarily deal with incentives distribution, but with social (including economic) benefits and costs related with the creation, statutory designation and management of the PPA, and with the regard given to the socio-cultural context.

The reserve was created through the acquisition of parcels of land. This is an innovative approach for nature conservation in Portugal. It is relevant to note that the purchased plots were part of fragmented (and partly abandoned) agricultural lands. As an illustration, the 2010 management plan registered the majority of the purchased plots being less than 5 hectares. The largest - *Quinta do Ervideiro* - amounts 175 hectares and stands as an exception. Moreover, a scanty number of landowners decide not to sell

their land; in these cases, lease agreements have been the alternative applied. Consequently, conservation grabbing seems not to have occurred; even if the fragmentation of land properties made the acquisition process time-consuming, informed and transparent contracts were signed. Nonetheless, it should be also highlighted that the purchase of lands with high conservation value had taken advantage from a relatively low market value, due to the factors mentioned above (e.g. localization, orography etc.).

Concerns especially regard the choice of putting the new-born rewilding strategy into practice throughout the Faia Brava reserve, including the PPA. On the one hand, the ecological restoration activities, such as the re-introduction of large herbivores - the key attractions of the reserve, along with rupicolous birds - have been one of the drivers of the revitalization of local businesses related to environmental tourism and the renovation of old houses (e.g. as hostel accommodations) and buildings, which are part of the cultural heritage of the nearby villages.

On the other hand, the communication strategies of the rewilding-related activities have especially targeted an English-speaking public. The website of the Rewilding Europe initiative only available in English version, and the safari StarCamp's website⁷³ are good illustrations.

The direction taken by ATN, when joining in 2013 the European Wildlife Bank, also challenges the way the local community perceive the values of nature and human-nature relationships. While over the last decade the evaluation of ecosystems services' approach has progressively entered the national agenda for nature conservation policies, without any significant criticisms, the wildlife Bank approach seems to go further as concerns the commodification of nature. The promotional flyer of the European Wildlife Bank explains that the tool intends to *"provide areas with missing wildlife"* and it is based on *"herds contracts"* which apply the following growth model: *"Normal reproductive rates mean that 100 animals will triple over 5 years, to 300. After 5 years 150 animals will then be returned to the Bank (a 50% return on the bank's core capital reserves over these 5 years) and leaving 150 animals ('the profit') with the project"*

⁷³ See <https://rewilding-europe.com/areas/western-iberia/>; www.starcamp-portugal.com

partner (a return of 150% on the original fully serviced and retired loan) (...)" (Rewilding Europe, 2013).

The novel narrative that uses financial terms to refer to environmental management, has gone hand in hand with the creation of fenced areas to release and contain the Garrano horses. This has resulted in a materialization of borders that clashes with the image and memories of the past landscape. As a result, the ongoing discourses and practices, putting forth a socio-ecological system re-making, have not encountered the wide acceptance of local communities (see also the Legitimacy principle).

Connectivity

The statutory recognition of the reserve as PPA automatically ensure its integration in the national network of protected areas, for which the National Authority is responsible. The network encompasses national and local protected areas, and partly overlaps with EU Natura 2000 sites (see chapter 5, section 5.2.2).

The institutional collaboration between ATN and the National Authority, has taken place in partnerships for European and national funded projects that do not regard the Faia Brava, rather than in issues concerning its management. Whilst recognizing the National Authority support through the dissemination of funding and networking opportunities⁷⁴, a founding member of ATN pointed out that a stronger collaboration is hindered by the reduction of resources the National Authority has been facing in the past decades, and a lack of institutional culture and capacity to cooperate and join forces with civil society's actors. Furthermore, referring in broader terms to public actors and to a fire event that hit the reserve, a member of ATN board referred: *"we feel they are abandoning us in most critical moments."*

The PPA is subjected to a set of spatial planning legal instruments, particularly to the Natura 2000 Special Protection Area, the Douro River basin Plan (Decree n. 19/2001) and the two Municipality Director Plans (Figueira de Castelo Rodrigo and Pinhel) (ATN, 2010).

⁷⁴ This is the case, for example of the International Land Conservation Network (ILCN).

A careful legal coordination among the instruments, supporting collaboration in policy making, is believed to take time, as the update of each spatial plan, to adapt it to contextual changes, usually requires. Nevertheless, interviews indicate two relevant examples of ongoing horizontal connections and cooperation with local actors, namely with the Côa Park Foundation⁷⁵ and the municipality of Figueira de Castelo Rodrigo.

The Faia Brava area is inside the Côa Valley Archaeological Park, and according to an archaeologist of the Côa Park Foundation *“it is a strategic ally of the Park because it protects the open air engravings (one is situated inside the PPA A/N) and all the surrounding landscape (...)”*. In the absence of a spatial plan for the Archaeological Park – it has not been yet approved- the management work if ATN is considered highly significant.

Additionally: *“Even if any partnerships has not yet been formalized, ATN is considered an important partner. We participate in environmental formation and conferences organized by ATN (...). Also an environmental educational programme has been implemented, encompassing educational trips to the Faia Brava reserve.”* The aim is to show the link between the cultural and the natural heritage, which is particularly strong as regards open air Palaeolithic engravings, and to raise awareness of the necessity of adequate recognition, protection and integrated management.

On its side, ATN with the support of the Archaeological Park and other local associations, had carried out the signage, maintenance and promotion of pedestrian trails, using old public roads. In 2008, this gave birth to the Grand Route of Côa Valley (*Grande Rota*) which crosses the PPA.

As regards the articulation with local authorities, this is particularly developed with the municipality of Figueira de Castelo Rodrigo, where ATN is based. As an illustration, ATN, as manager of the forest intervention area (ZIF) integrates the local Commission for the protection of forest against fires. Moreover, the municipality has usually promoted the natural reserve in fairs and informed ATN about national and international funding opportunities. Projects in partnership with ATN have already been

⁷⁵ It was created in 2011 and manages the Côa Valley Archaeological Park and the Côa Museum (www.arte-coa.pt).

implemented (e.g. the ECOA project for environmental education), and in other cases the municipality has provided facilities and transports.

Remarkably, the above mentioned good practices regarding local connectivity are facilitated by informal networks and spatial proximity; however, as the Municipality officer highlighted, the long-term stability of these synergies may be threatened by the lack of resources and by “*the fact that ATN employees and technicians often change.*”

Resilience

Fires events have been widely pointed out as the main threats for habitats and species survival within the PPA. Specifically, notwithstanding the ability of nature to regenerate itself, fires have their major impacts on the objectives of the conservation strategy. This aspect is thus emblematic to assess the resilience of the PPA.

In the face of this threat, enhancing technical know-how and training local actors are key goals indicated in the management plan (ATN, 2010). Wildfire prevention is also directly tackled through volunteer’s campaigns for fire surveillance, the development of natural grazing systems, which reduces the availability of fire fuel, and through the participation of ATN in the Forest Intervention Zone (ZIF).

Moreover, the integration of ATN in the local Commission for the protection of forest against fires has fostered information sharing and new knowledge assimilation, which are considered crucial to respond to threats and new SESs dynamics. In particular, interviews pointed out that social networks at local scale and the collaboration with the Municipality of Castelo Rodrigo have played, and are still playing a major role, as regards knowledge transfer. As highlighted by the officer of the local authority: “*technical training actions for municipality employees are also disseminated and open to ATN employees.*”

The incorporation of new experiences and information acquired during the referred activities is reinforced by the requirement for annual monitoring and evaluation reports and the update, every ten years, of the management plan.

7.4.2 The ecological fit

The spatial dimension

The first years of activity of ATN were devoted to the protection of threatened birds' nesting sites. Since then, the goals of ATN intervention have progressively become more ambitious; the 2010 Faia Brava management plan also included the 10% increase of the diversity of the endangered vertebrates and the ecological restoration of Mediterranean woodlands, which principally requires the reduction of the risk and impacts of fire events. Active restoration and preservation interventions, conducted within the PPA, are supposed to be diffused and scaled-up as good practices in the long term. Nevertheless, the fire events that have burned part of the ATN owned lands in subsequent years (the last in 2017), clearly show that the ecological processes addressed transcend the boundaries of the PPA.

In order to increase the geographical reach of its management interventions ATN is expanding the extent of its natural reserve outside the boundaries of the PPA, through the purchase of additional lands. It has also implemented management agreements with landowners in buffer zones. Indeed, reaching an appropriate scale requires measures that go beyond the control of a single manager.

Generally, effective collaboration (see also the Connectivity principle), spatial connectivity with existing protected areas or the availability of corridors, allowing species to move across fragmented landscapes, are expected to enhance the ecological fit in spatial terms. As regards the last two points, it is important to note that in the decree regulating PPA it is stated that PPAs can be established outside the boundaries of national protected area, but no specific provisions exist requiring a particular location of the area with respect to national or international systems of protected areas.

The temporal dimension

The Portuguese PPA designation is based on management protocol that the National Authority signs with a private actor owning or managing private lands which are not inalienable (see Decree n. 1181/2009). This means that PPA's status does not transcend changes of ownership. If the land is sold, the nature conservation goal is not automatically incumbent on future owners.

In the case of Faia Brava, ATN conservation mission, as well as the objectives and temporal term (10 years) of the management plan, demonstrate the long-term intent for conservation of the organization. Nevertheless, since no legal instruments ensure PPA permanence nor the continuation of conservation intent for future owners, long term conservation is highly dependent on NGO's capacities and survival. This, in turn, depends to a great extent on funding (e.g. access to funding programmes, donations etc.). As one of the founder of ATN spelled out: "*Ensuring the survival of an NGO is a big challenge*".

Finally, it is important to underline that the area of the Faia Brava overlaps with the Côa Valley Special Protection Area (SPA), part of the EU Natura 2000 network. The SPA was established in 1999, more than a decade before PPA recognition (Decree-Law 384-B/99), and prohibits human activities that adversely affect the long-term survival of the birds species for which it was designated⁷⁶. This means that the legal framework for the protection of bird species is defined under the Birds Directive and the national Natura 2000 Plan. Nonetheless, the PPA designation add to this since it can prohibit, or subject to the authorization of the National Authority, activities that may harm biodiversity, or other characteristics of the protected area. Exceptions apply in the case of an action in the public interest or an enterprise with a relevant general interest (Article 21 of the Decree-Law n. 142/2008).

The functional dimension

Active management practices within the PPA have focused on the functioning of ecological processes. For example, the maintenance of the traditional cereal farming and silvo-pastoral practices aims at restoring a mosaic of habitats that allow birds' preys to survive.

Management practices are validated by the National Authority mainly through the monitoring of the management plan and the annual report, and also through single procedures. As an example of the latter, it is relevant to note that the National Authority has not issued permits to (re)introduce wild goats (*Iberian ibex*) in the PPA. As reasons

⁷⁶ See also the Sectoral Plan for Natura 2000, approved in 2008 (Resolution of the Council of Ministers n. 115-A/2008).

for the refusal it indicated i) the fact that the area does not have suitable physiographic and spatial characteristics (unlike e.g. the Peneda Gerês national park), and ii) the critical interactions with farmers and hunters that the “rewilding” reintroduction may cause in those specific conditions.

Similarly to what referred above, regarding the temporal dimension of the ecological fit, effective management can be hindered by the lack of appropriate resources to fulfil conservation objectives. These encompass not only the (limited) sustainability of ATN financial resources, mostly based on project grants, but also technical resources (e.g. knowledge, organizational factors). Despite the fact that founding members of ATN and part of its employees have formation and training in ecology and conservation biology or forestry, it is important to stress that these attributes and skills may variate along time or fail to address new SESs’ dynamics (see also the resilience criterion).

7.5 Discussing the suitability of current institutional arrangements

In Portugal, Faia Brava stands as an innovative model for locally-based conservation actions and sustainable land management. Overall, the social and ecological assessment shows that ATN has been able to put in place active conservation interventions through partnerships and *ad hoc* projects (with e.g. local public actors, forest landowners and schools), promoting environmental awareness, ecological restoration and testing practices for fire mitigation and management. The fostering of these actions has been facilitated by both international networks and an increasing number of informal local networks. The former have allowed ATN to access sources of funding which have so far resulted essential for the creation and survival of the NGO and, consequently, to the financial sustainability of conservation actions implemented in the natural reserve.

The recognition as a PPA and its integration in the national network of Protected Areas (see table 7.2), have provided a “seal of quality” which has enabled Faia Brava to gain more national and international exposure and credibility. This was the key aim of the recognition request by ATN to the National Authority, that occurred almost ten years later its early conservation activities in the area.

Type of recognition	National recognition and integration in the national network of protected areas
Actors	Private actors: Individual private landowners or NGOs (also as manager of private land) Public actors: National Authority for nature conservation
Requirements for PPA recognition	<ul style="list-style-type: none"> existence in the area of relevant natural values that need specific conservation and management actions management plan with active nature conservation interventions area outside the national Protected areas network <p>Stakeholders involvement in the process: the consultation of the local authorities where the requested PPAs is located is promoted during the process for PPA recognition conducted by the National Authority</p> <p>Expiration of recognition:</p> <ul style="list-style-type: none"> Voluntary relinquishment Non-compliance with the requirements for recognitions (e.g. management plan) Non-compliance with legislation (e.g. spatial plans)
Contractual model	Ten-year Management Agreement between the National Authority and the private actor
Monitoring	The National Authority periodically assesses (at least every 3 years) the maintenance of the requirements underlying PPA classification and the management protocol
Incentives	No direct national financial incentives (for land purchase and management) Indirect fiscal incentives (e.g. tax exemptions for NGOs and for private donations)

Table 7.2 The institutional arrangement of private protected areas

Sources: Decree Law n. 142/2008, Decree n. 1181/2009, Faia Brava Management Agreement

As regard the consequences of the PPA establishment by legal means, it is important to highlight that the protection of endangered birds species in the area, is provided by its designation as a Natura 2000 site under the Birds Directive (*Vale do Côa* Special Protection Area, SPA). This means that the main consequence of the designation as PPA does not regard directly the legal protection of species and habitats in the area, but its active management. Particularly, conservation actions indicated in first PPA management plan mainly reflect the management orientations indicated for the Vale do Côa SPA⁷⁷.

⁷⁷ See the report of the ecological characterization and management measures for the Vale do Côa SPA, available here: <http://www2.icnf.pt/portal/pn/biodiversidade/rn2000/resource/doc/zpe-cont/vcoa> (accessed 02/04/2020).

Thus, ATN conservation activities at local level, its capacity to access European and international funds and technical resources, seem to compensate: i) the difficulties that the national authority has faced, due to the increasing cuts of public resources for conservation and ii) the centralization that took place after the 2007 reform (see chapter 5, section 5.4). Indeed, against this background, the establishment of the public-private partnership responds to the wide call for urgent management actions for the conservation of Natura 2000 sites (Hermoso *et al.*, 2019).

Nevertheless, our analysis reveals social and ecological issues (see table 7.3). In particular, the fire caused by a shepherd suggest that Faia Brava establishment has produced a tension between traditional activities and conservation objectives, that recalls those caused by the imposition of regulations in public-run protected areas. After the recognition as PPA, these social tensions seem to have translated in the distrust of local residents about the innovative conservation approaches implemented in the area. The refusal of the National authority to issue permit for the (re)introduction of the *Iberian Ibex*, grounded on social and ecological motivations point out the negative implications that rewilding practices could have within specific contexts.

A related key concern deals with the lack of engagement of local stakeholders in the definition of the (first) management plan. The pragmatic rationale underpinning this approach involves the principles of ecological fit: participatory processes can be costly and sometimes cause unnecessary delays in conservation decisions needing a quick response. However, in the long-run an inadequate local communities' involvement may undermine the local support for conservation activities, especially among those who are not benefitting directly from the PPA management (e.g. through tourism related activities).

On this last point, the development of nature-based tourism, focusing on rewilding approach which is strategically reintroducing flagship species depicted in the Côa Valley carving, are expected to deliver economic and social benefits stimulating the local economy. Nevertheless, our analysis shows a lack of mechanisms to ensure the fair distribution of these benefits, especially considering the ongoing transition from a fragmented small scale ownership landscape to a concentration of the "natural asset" in the hands of a single NGO.

Additionally, we found that some tourism activities aim to deliver experiences that i) are far from traditional uses of natural resources and local connectedness with the environment, and ii) target international tourists. The eco-lodges of the StarCamp, similar to those established in Africa, are an emblematic example (see also Pellis, 2019). This practice has elsewhere been referred as form of gentrification, as it reshape the territory to adapt it to the tastes of external (and affluent) actors (Voumard, 2019; Duffy, 2015).

Negative outcomes may also derive from a promotion of market-driven logic and commodification discourses that have been used, for example, in promotional materials on rewilding strategies (in English). Indeed a growing number of studies are supporting the claim that materialistic values reshape societal relations with nature, reducing pro-environmental behaviours (Hurst *et al.*, 2013). Also, the logic of “selling nature to save it” makes conservation dependent on external markets and pushes it away from people association with their intrinsic values.

As regards the connectivity and the resilience principles, our findings have shown that collaborations with actors a higher institutional level (e.g. state actors, National Authority) and the articulation of strategies and objectives with sectoral policies (e.g. cultural heritage conservation) are far less developed than bottom-up informal networks and practices set up at local level. An exception is the promotion of small-scale forest owners' cooperation, through the ZIF approach which, though with many weaknesses, is part of the national policy framework for forest management and fire protection (see e.g. Valente, 2013).

A monitoring and evaluation process regarding Faia Brava management is in place, as required by the national PPA legislation and the management agreement (see table 7.2). It is based on progress reports. Remarkably, no other formal mechanisms have been yet set up to foster a collective learning-by-doing process in view of the co-production of a strategic vision for nature conservation in the region.

The role of the state, through the National authority interventions, has so far been limited to supervision, verifying PPA compliance with the conditions required by law, and to the provision of information regarding for example funding opportunities

and international networks. As a result, the initiatives at local scale for enhancing connectivity and resilience of the PPA are threatened both i) by the lack of more overarching mechanisms to foster articulation with other actors at different governance level and ii) by the absence of ad hoc financial incentives or fiscal benefits for the creation and management of PPA, that put at risk ATN organizational sustainability.

Additional weaknesses of the institutional model emerge from the assessment of the ecological criteria. In particular, the unfolding of the management objectives has highlighted the limitations of the requirements regarding the position and coverage of the area. On the one side, the loose requirements (that is, “being outside of a national protected area”) is enlarging the national network of protected areas and permitting the management of a biodiversity hotspot. On the other side, in the absence of a landscape approach for nature conservation, the lack of effective connection with other protected areas may undermine some management efforts.

Furthermore, ATN is a small local organization principally dependent on project grants, donations and limited and instable source of income (e.g. sell of local products, tourism activities). Until a more sustainable funding stream and/or a technical public support are provided, the maintenance of technical capacity to tackle new threats for nature conservation management (e.g. climate change, the intensification of wildfires) is at risk. Concurrently, it is important to underline that the technical and scientific capacity of the private actor is not explicitly indicated as criteria for the statutory recognition of PPA. Nevertheless, it is indirectly monitored through the assessment of the management plan and annual report.

	Weaknesses and threats
Legitimacy	NGO perceived as an external actor who implements environmental management measures that conflict with traditional land uses
Transparency	Lack of transparency to avoid conflicts with “distrusting” local residents
Inclusiveness	<ul style="list-style-type: none"> ○ Weak involvement of stakeholders during PPA recognition process by the National Authority ○ Weak involvement of local communities in problem framing and design of management plan
Accountability	The National Authority perceived as a distant actor undertaking a challenged regulatory role
Fairness	<ul style="list-style-type: none"> ○ Concentration of land and natural resources into the hand of a private actor (NGO) ○ Tendency to produce gentrification and commodification of nature
Connectivity	Weak collaboration across governance scales (with state/national actors)
Resilience	Threats for NGO organizational and financial sustainability
E.F. Spatial	Lack of spatial connection with national protected areas
E.F. Temporal	Long term protection is not ensured
E.F. Functional	Threats to the maintenance of adequate technical and scientific capacities

Table 7.3 Faia Brava: social and ecological weaknesses and threats

7.6 Concluding remarks and methodological considerations

The current Portuguese institutional arrangement for PPA is quite simple. It involves the recognition of the PPA by the National Authority. The state actor certifies that legal requirements are met (mainly the existence of natural values in the area and the elaboration of a management plan, see table 7.2) and successively monitors their compliance through the evaluation of an annual management report.

On the one hand, this loose institutional arrangement seems to have given ATN flexibility and freedom to explore new approaches for nature conservation. On the other hand, our findings reveal that major pitfalls and threats, concerning institutional acceptance and social equity, derive precisely from the fact that the Faia Brava is a testing ground for ATN as regards two novel approaches in Portugal: land acquisition for nature conservation and the implementation of the rewilding principles. In these circumstances, requirements that are more stringent may enhance the social fit. Particularly, the requirement for participation of stakeholders in the elaboration of the management plan may improve the democratic control of the nature conservation tool.

Other examples on how to improve the institutional arrangements can be encountered in the literature on good practices for PPAs (see e.g. Mitchell *et al.*, 2018).

In particular, mismatches with the criteria regarding social organizations, that is connectivity and resilience, and with those concerning ecological fit, can be addressed through: i) the articulation of PPA objectives with those of spatial plans in force in the area and ii) the creation of a coordination panel including Universities and public actors at different governance levels (e.g. actors responsible to tackle fire outbreaks; municipalities). This can help to improve the knowledge base and sharing and engage multiple actors in tackling common threats. Public technical support is also considered crucial to foster effective and efficient adaptive management and accurate measuring progress towards PPA' objectives. Furthermore, prioritizing lands with high natural value in buffer zones of national protected areas might enable synergies and help catalysing actors' collaboration in management efforts (Fitzsimons *et al.*, 2013).

In order to ensure long-term protection and management Mitchell *et al.* (2018:14), suggest that NGO/landowner which manages the PPA *"might make an arrangement with a partner conservation NGO to assume responsibility"* in case of the initial NGO is no longer able to fulfil requirements. Additionally Payment for Ecosystem Services schemes have been already implemented as forms of incentives for the creation and maintenance of PPAs (e.g. in the Brazilian state of São Paulo, see Mitchell *et al.* 2018).

Another promising instrument, which has the advantage of not necessarily requiring additional public resources, is the ecological intergovernmental fiscal transfer mechanism. It redistributes finances from state level to local governments also applying ecological criteria. In Brazil, it has been successfully used to compensate municipalities for the opportunity-costs related to the creation of protected areas (including PPAs) or restricted sustainable use areas, and incentivize their improvement and spill-over benefits (see the pioneering case of the State of Paraná; Loureiro, 2002).

In Portugal, ecological criteria in the distribution mechanism for fiscal transfers have been introduced in 2007 to favour municipalities that have on its territory protected areas of the national network and/or Natura 2000 sites. However, the low value per hectare (around 50 euro/ha of conservation area; Santos *et al.*, 2012) and the lack of earmarking for conservation objectives have been identified as key aspects that have contributed to hinder the effectiveness of the mechanism. Suggestions for

improving it encompass its combination with agri-environmental schemes (Santos *et al.*, 2015).

Further research can be conducted on how to coordinate the design of these two instruments (PPAs and ecological fiscal transfer), taking into consideration the criteria for social and ecological fit, to incentivise the designation and management of PPAs.

As regards the assessment framework, it proved to be useful and appropriate to i) conduct an evaluation of the suitability of PPA to tackle nature degradation whilst meeting societal needs and ii) support decision-makers aiming to improve the institutional arrangements for PPAs. In particular, the framework enabled to shed light on connections between the dimensions of social and ecological fit and detect current mismatches and threats. Whilst this research has privileged a qualitative method, appropriate for an exploratory stage, the framework could evolve with the introduction of quantitative criteria, and criteria requiring a less time consuming evaluation.

Lastly, taking into consideration the dynamic of SESs and related uncertainties (see chapter 6, figure 6.2), it is relevant to underline that an enhanced institutional structure may become sub-optimal as circumstances change. This call for a continuous monitoring and adaptive governance that should also consider how the tools is coordinated with regulations and other policy instruments for nature conservation.

CHAPTER 8. CONCLUSIONS

8.1 Introduction

This research explored the emergence of Private Protected Areas (PPAs) as innovative institutional arrangements for nature conservation policies and investigated their suitability to enhance conservation whilst caring for social issues.

To begin with, an investigation on PPAs recognised as policy tools in European countries, has pointed out their nature as institutional settings resembling public-private partnerships. Therefore, in countries that have centred their nature conservation policy on public-run protected areas and top-down regulatory approaches, the emergence of PPAs has appeared to be an emblematic result of a governance change towards alternative voluntary approaches and partnerships with non-state actors.

Successively, this observation prompted a reflection that revolved around two broad and intertwined queries: i) Why and how has this direction been taken? ii) Is it the best direction to achieve more desirable socio-ecological arrangements? Aiming to address these two issues, the research has focused on the Portuguese case. In particular, we have examined the dynamics that have generated the current institutional arrangements for PPAs. We then focused on the case study of the Faia Brava (the only PPA to date in Portugal) aiming to question the claims of the policy tool.

In this concluding chapter, the insights and contributions provided by this research will be presented, recapitulating how the research questions (see chapter 2) have been addressed. An outline of a future research agenda will close this chapter.

8.2 Private protected areas and the rescaling of conservation policies

(Research line A)

- Research Question 1: *What are the features of PPAs institutional models in EU countries?*

Over recent decades, land under private ownership voluntarily managed by private actors for conservation purposes has proliferated rapidly worldwide. Privately

protected areas have been also increasingly promoted in international environmental agendas as a promising policy tool to complement public-run protected areas. Despite the multiple studies that this phenomenon has sparked, Europe is still an underrepresented region in the academic literature.

Aiming to contribute by redressing the geographical bias, we explored the features of PPAs in four E.U. countries that adopt and report them as distinct governance models within national protected area networks. Notwithstanding diverse institutional heritages and contexts, a common element has emerged: institutional models labelled as PPAs all have the characteristics of public-private partnerships. They are differentiated by a distinct degree of public actors' involvement as facilitators and regulators and by the particular nature of private actor, owner and manager of the land (e.g. as NGOs, private landowners).

These findings point out the peculiarity of our research subject among a broad array of voluntary approaches for conservation on private lands. In particular, our definition originated from the literature review and the comparative study highlights the public policy standpoint of our research; the definition we propose for PPAs is the following: protected sites under voluntary long-term conservation, owned and managed by private actors (or under their control), relying on a variety of public-private partnerships settings.

- Research Question 2: *How and why did PPAs emerge as a complementary institutional model for protected areas in Portugal?*

A critical analysis of governance dynamics concerning the establishment and management of protected areas has focused on when and how non-state actors' role has been recognised and promoted in Portugal. Here, the emergence of PPAs appears to be a key element of discontinuity to the centralist administrative heritage of the country and the top-down regulatory approaches in nature conservation policies.

A diachronic analysis, starting from enactment of the first Protected Areas Act in 1970, has shown that PPAs are not entirely new institutional models within the national network of protected areas. Indeed, in 1979 the Decree-Law n. 264/79 gave the opportunity for rural landowners to create hunter free areas to protect bird species

(named ornithological reserves). However, the legislative framework and regulations of PPAs currently in force, dating back to 2008-2009, have a different genesis and underpinning rationales.

In particular, we situate the introduction of the recent policy framework for PPAs against the backdrop of increased state-market-civil society interactions, across governance levels. In other words, we consider the emergence of PPAs as policy tools to be emblematic of a restructuring of nature conservation policies.

Concisely, the past three decades have witnessed an opening up of decision-making processes in nature conservation and the emergence of new institutional arrangements for PAs. In particular, the state-centred model has been gradually altered by provisions for incremental democratisation (e.g. public hearings) and governance rescaling measures. As argued elsewhere, regarding the development of environmental policies in Portugal, crucial drivers for this shift have been the accession of Portugal to the E.U. and the compliance with its legislation, the multiplication of international legal and policy instruments for conservation (e.g. CBD) and the integration of policy makers and environmental movements into international communities (Queirós, 2016).

At the crossroad of these trajectories, PPAs have been introduced to complement national protected areas' governance models, together with local protected areas, established and managed by municipalities. Indeed, partnerships with private actors are claimed by international discourses to mobilise and bridge non-state actors' resources and expertise. This is a powerful argument within a Portuguese context, characterised by increasing obligations at international level (e.g. management of E.U. Nature 2000 network) and a reduction in public resources available to the national authority responsible for conservation, which was worsened by the 2008 crisis and the following austerity measures. Additionally, the professionalisation of conservation NGOs enable them to side step national jurisdiction to find funding opportunities at an international level, making them privileged actors as managers of PPAs (see also Apostolopoulou *et al.*, 2014). The voluntariness of the tool is also considered crucial to avoid the rise of resistances and discontent usually caused by central state regulatory approaches.

The trend of governance rescaling is in line with other European countries, especially those with administrative centralism and no tradition of land-trusts, and, broadly, with a global trend for the governance of protected areas (Hongslo *et al.*, 2016; Dearden *et al.*, 2005). What the Portuguese case brought to the debate on the government to governance shift, is the active role of the NGO, which currently owns the only recognised PPA. It was able to accelerate the policy regulation framework for PPAs, taking advantage of a window of opportunity and informal networks with policy-makers. Note that the PPA statutory recognition and integration into the national system of protected areas, play significant roles as “quality seals” for the area and for the conservation actions planned and implemented by the manager/NGO.

Thus, the emergence of the recent generation of PPAs as policy tools, specifically their regulation, was also more driven by the interests and motivations of a local NGO than by a proactive policy-making. This is in line with the position that increasingly describes the shift from government to governance as a “hollowing out of politics”, blurring the separation line between public and private (Swyngedouw, 2005; Logan and Wekerle, 2008). Furthermore, the resulting decentralisation of protected areas’ governance through the involvement of “flanking organizations” (NGOs) has been frequently pointed to as a constituent process of neoliberal conservation (Adams *et al.*, 2014; Holmes and Cavanagh, 2016), warning of the state off-loading responsibilities.

The genesis of Portuguese PPAs as policy instruments is reflected by the essentiality of the public private partnership arrangement. Indeed, they are not part of a public led programme with public incentives, as in other European countries, such as Finland and Austria. PPA institutional arrangement is instead quite essential and involves the recognition of the PPA by the National Authority, which certifies that legal requirements are met and monitors their compliance through the evaluation of an annual management report. These features are also likely to concur explaining the very limited success of the conservation tool.

Relatedly, the over-arching analysis on the evolving governance of protected areas, which promises more inclusive state-civil society relationships, also unveiled contradictions. In particular, whilst the range of actors who can participate in decision-making processes has progressively widened, their involvement has not been deepened

likewise. Additionally, the 2007 recentralisation reform has limited local authorities' participation in the management of national protected areas. These findings have reinforced our intent to question the claims of PPAs.

8.3 Beyond the rhetoric of horizontal and inclusive approaches for conservation

(Research line B)

In the second part of the research we intended to question the ability of PPAs to simultaneously deliver i) a more socially just alternative to top-down regulatory approaches, ii) more effective nature conservation, while limiting public expenditure.

Going further, the aim is to go beyond a dichotomous viewpoint, presenting alternatively, PPAs as a panacea for nature conservation (especially in countries with biodiversity-rich land under private ownerships) or automatically rejecting PPAs altogether as neoliberal technique. To do this, we empirically explored how PPAs' institutional settings function within a specific context. The research questions addressed were the following:

- *Research Question 3.1: To what extent are current Portuguese PPAs institutional settings able to address social fit and ecological fit?*
- *Research Question 3.2: Under which conditions are they able to address social fit and ecological fit?*

In order to unravel the intertwined impacts of PPAs, a systemic standpoint and an interdisciplinary approach were adopted. In particular, we developed an assessment framework which draws on the concepts of social and ecological institutional fit and is underpinned by a socio-ecological system approach. We applied this to the case of the Faia Brava natural reserve owned and managed by a local conservation NGO.

While it may be too early to evaluate the overall impacts of the PPA-Faia Brava, due to its recent establishment (2010), it is possible to draw preliminary insights from the analysis we conducted. On one hand, the project appears to be a promising model for local based active conservation interventions. These interventions are supported by

international networks and funding, and informal local networks, both of which are reinforced by the recognition of the site as a PPA.

However, being the testing ground for two novel and contested approaches (that is land acquisition for nature conservation and the implementation of the rewilding principles) the novel model may produce deleterious social impacts, which would be counterproductive for the sustainability of the socio-ecological system.

Indeed, the detected pitfalls include i) a weak involvement of local communities in the PPA recognition process and in the elaboration of the management plan, undermining a democratic control, ii) allowing a concentration of land and natural resources to be placed into the hands of a private actor, without the guarantee of long-term protection of the site, and the eviction of rural communities from natural resources use (e.g. grazing), iii) the tendency to produce conservation gentrification and commodification of nature which can entail a counterproductive reshaping of the human-nature relationship.

Additional drawbacks encompass the lack of spatial connectivity with existing protected areas and a weak articulation of the objectives of other policies, and the lack of consistently available resources for the NGO. Consequently, whilst the required active management actions do avoid the creation of a “paper park”, the long-term ecological effects - e.g. of the interventions for ecosystems’ restoration - are also fraught with uncertainties.

Current PPA settings determine a multifaceted and collaborative interaction between state and non-state actors, which is not based on a hierarchical regulatory model: this is their novelty. Nevertheless, the implications highlighted above show that the current design of the institutional arrangements appear unable to avoid the (re)production and reshaping of pitfalls and social issues usually associated with top-down regulations in public-run protected areas, neither to elude the risk of advancing a neoliberal environmental governance.

A policy instrument with the features of the one under scrutiny here, can be potentially appropriated for hosting local alternatives that generate environmentally and socially just forms of conservation. The literature has even highlighted cases in

which market instruments and projects, framed as neoliberal conservation, have been successfully hijacked by local communities for challenging pre-existing inequalities (see Holmes and Cavanagh, 2016).

However, we face times characterised by a shrinking state, a lack of public resources and government capacity, as well as the will, to deal with wicked environmental issues (viz. tackling their root causes). Moreover, as put by Swyngedouw (2005:1993), we are witnessing the rise of neoliberal governmental rationality leading to the erosion of the “*democratic character of the political sphere (...) by the encroaching imposition of market force*”. Within this context, local and small environmental NGOs are increasingly reliant on international funding and organisations putting forth an agenda which bases conservation on spectacle and representation (see Holmes and Cavanagh, 2016) and (still) often focuses on ecological outcomes that are detached from the social ones. Indeed, the expansion of markets for nature conservation is an attractive option for private actors managing PPAs, especially when scarcely funded through other sources.

Our findings suggest that under these circumstances, PPAs are very likely to entail direct and indirect social tensions and counterproductive implications. Moreover, as regards to the ecological side, whilst the public-private partnership is likely to successfully bridge the specific expertise and skills of private actors for conservation and restoration, positive outcomes can be undermined by a loose state intervention, e.g. due to the lack of more holistic spatial planning, weak institutional connectivity and conditions for the maintenance of NGOs capacities.

To sum up, what the empirical study illustrates demystifies the celebrative discourse that presents PPAs as a panacea for nature conservation; a discourse that has recently gained considerable traction worldwide.

Lastly, the identified social and ecological mismatches, the risks outlined above, can be addressed by reinforcing the democratic control and reshaping the role of the state and/or public actors which is currently limited to supervision and monitoring actions. In this respect, a redefinition of the state role is needed, one that goes beyond the institutional setting for PPAs calls for new resources, organisational and cultural

transformations, and coordinated efforts in public policies for sustainability, especially towards the creation of a supportive context for collective pro-environmental intrinsic values.

8.4 Contributions and limitations

This study has provided significant and diverse contributions. The core contributions are highlighted in figure 8.1.

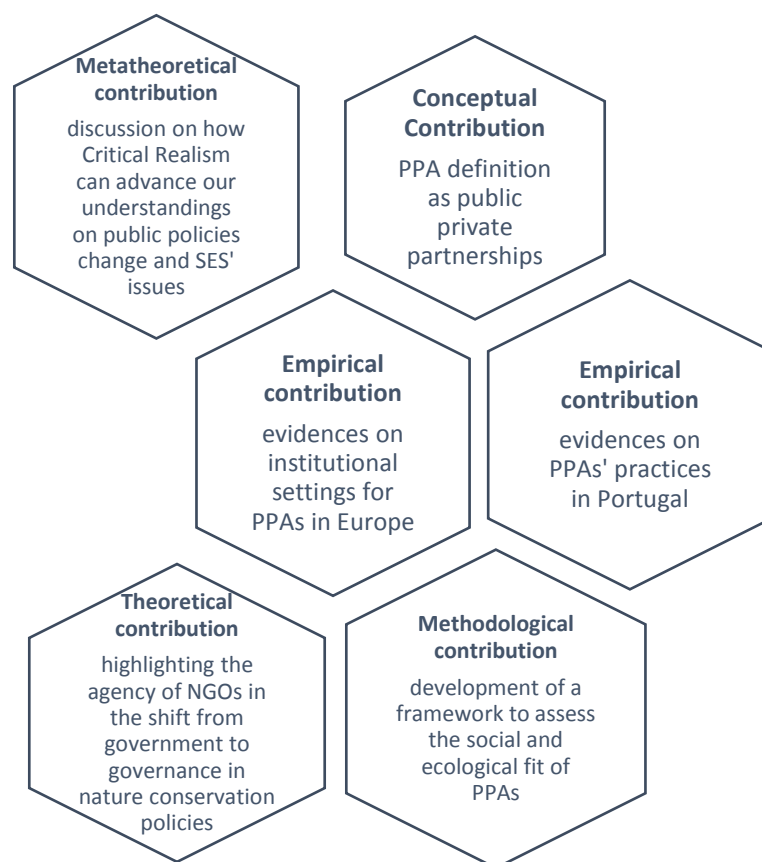


Figure 8.1 Research contributions

In particular, the comparative study on PPAs institutional models in four European countries, and the focus on the Portuguese case, provided empirical evidences that have contributed to redress the geographical bias identified in the literature, that is the little attention paid to PPAs in Europe. Moreover drawing on this comparative study and on a literature review on PPAs, we proposed i) a definition of PPAs which adopts a public policy standpoint and ii) a related descriptive framework which aims to

facilitate the systematization of the large variety of PPAs' institutional models in order to contribute to a more systematic comparison and analysis.

The research has also provided new relevant insights to the debate over the shift from government to governance in nature conservation policies. This advance has been built on empirical evidences about the adoption of PPAs as policy tool and on a broader diachronic and critical analysis of the governance dynamics concerning the rescaling of protected areas' establishment and management in Portugal.

As regards the theoretical contribution, it is important to note that the "government to governance" perspective adopted in the Research line A (Research question 2) is a descriptive framework rather than an analytical tool with explanatory power. Therefore, as a note of caution, the theoretical contribution should not be intended in the strict sense. Nevertheless, we shed light on the processes at play in the (re)shaping of nature conservation governance and policy changes, highlighting for example the key role played by environmental NGOs and policy entrepreneurs, thus providing a crucial base for theoretical development.

Another key contribution is the development of a multi-criteria framework for the assessment of the social and ecological fit of institutional arrangements for PPAs. The framework is grounded in the theoretical and empirical research on social and ecological systems fit and on the principles of good governance for PPAs. Moreover, its design takes into account and integrates the multi-dimensional dynamics of human-environmental interactions and the co-evolutionary relationship between institutions and contextual settings. This practical output strives to inform policy-makers and practitioners providing them a suitable tool to help them design PPAs' institutional models with an improved socio-ecological fit. Additionally, its application has provided crucial insights on the suitability of PPAs' institutional settings in promoting more socially and ecologically just PPAs' practices for nature conservation.

Finally, this study also offered a meta-theoretical contribution adopting the main tenets of Critical Realism and discussing the potentialities it offers to underpin and guide a research on policy change and socio-ecological systems transitions. Crucially, Critical

Realism combines ontological realism and epistemological relativism, building solid premises for interdisciplinary research.

This research is affected by a number of limitations that have been addressed and mitigated during the research work and/or identified to provide future improvements. Regarding the case study research design, it is crucial to underline that it is usually criticized since it provides little basis for the generalization of the findings. Nevertheless, a single case study approach has been chosen for our investigation (both for Research line A, Research question 2, and for Research line B) since it allows us to conduct intensive qualitative research on the emergence of institutional settings for PPAs and on their social and ecological fit: two topics that lack detailed preliminary research and therefore call for an exploratory in depth study. This does not strive to lead to conclusive results, nevertheless it has proven to be a crucial and necessary first step to gain insights into the research topics and propose and refine hypotheses to be tested in future research works. It has also enabled an iterative refinement of the initial research questions.

An additional note of caution regards the fact that the selected case study for the Research line B, the natural reserve of Faia Brava, is to date the only PPA recognized in Portugal. This has inevitably forced our choice. Moreover, the insights gained from the social and ecological fit assessment should be considered preliminary insights, due to the relatively recent establishment of the Faia Brava as a PPA (2010). Indeed, the still short life of conservation management activities clashes with long-term scale of the social and the ecological impacts. That is, we should consider that there are substantial time lags before interventions translate into detectable outcomes. For this reason, the research would benefit from a follow-up study.

In sum, our aim (as regards, especially, Research line B) was to conduct an exploratory research and to test the proposed social and ecological assessment framework. Indeed, during the collection and analysis of data, aspects for future improvements were detected. In particular, a set of assessment criteria, with a rating scale, that also requires a less time consuming evaluation, would facilitate the application of the framework by policy-makers and practitioners (see also chapter 7, section 7.6).

Moreover, data gathering and the subsequent analysis could have been enriched by interviews with a greater number of local communities' representatives. This limitation has been partly overcome by the collection and analysis of secondary sources. However, the overall analysis and discussion of findings has suffered from a lack of available literature on both i) the rescaling of conservation policies in Portugal and on ii) PPAs' institutional fit.

Finally, it is worth to note that conducting interviews in a second language (Portuguese), and successively translating part of them into English, has been a time consuming and challenging task.

8.5 A future research agenda

The emerging research field of sustainability transition emphasises the need of deepening our understanding in the role of public policies in supporting the re-design of human impacts on the environment and fostering long-term change towards sustainability (Edmondson *et al.*, 2019; Geels *et al.*, 2016). In particular, much remains to explore and discuss on how state/public actors' roles should be reshaped to help design alternatives - to the current development model based on the growth paradigm - to focus both on human and ecological well-being (Otero *et al.*, 2020).

To this effect, and considering our research topic and the limitations outlined above, it would be valuable to use the developed analytical and assessment framework to explore PPAs institutional models and practices in other contextual settings. Gathering more data is crucial to test the hypotheses put forward on the basis of our case-study-based exploratory research. In other words, multiple case studies would allow us to identify patterns of occurrence and to trace them back to a similar configuration of settings and causal mechanisms.

The developed framework has also the potential to be adapted for the assessment of public-run protected areas, which increasingly rely on private sector contributions (e.g. in their daily management). Moreover, future expansions of the framework would benefit from an updated literature review on the topic of "ecological

fit”, which is progressively gaining attention by practitioners and scholars, and from the design of a set of quantitative criteria developed by an interdisciplinary research team.

Further research may consider not only a more suitable role for the public actors as within the public-private partnership but also, and more broadly, a supporting role to facilitate (or at least, not to hinder) the emergence of alternatives, their replication and scaling up. For example, a recent proposal that deserves a closer examination and discussion (e.g. on how it can be articulated in relation to PPAs’ institutional settings) is the introduction of a conservation basic income: a mechanism for funding nature conservation that aims to go beyond market-based approaches (Fletcher and Büscher, 2020).

Further to this, considering that areas voluntarily managed for conservation purposes by private and collective actors are expected to diffuse rapidly in the coming decades, future research should focus on promising practices. For example, it is crucial to explore those bottom up experiences (e.g. management of the commons) whose approach and strategies are able to *“reconfigure uneven socio-ecological relations”* and achieve *“a more equitable distribution of social power and a more egalitarian mode of producing nature”* (Swyngedouw, 2011: 82). Particularly, it is important to diagnose patterns of configuration of factors explaining the emergence, success and ability to reverberate politically of the identified practices, for example the relationships with public actors and state power, and the agency of people through communing.

8.6 Reflections on my PhD journey

This dissertation is just one of the many outputs and achievements of a PhD journey that have enriched me both personally and professionally. As a researcher, I had the opportunity to develop a bundle of research skills, such as conducting critical literature reviews, designing and conducting semi-structured interviews and developing an original assessment framework. Additionally, I have enhanced the ability to present the research work in international conferences, to communicate it to a non-academic public, and to structure and write scientific papers. Because of the interdisciplinary nature of the research work, I have also felt the need of defining the epistemological

and ethical standpoint of the investigation. This prompted a personal reflection on the importance of having a solid meta-theoretical basis, which I believe will prove to be crucial for future projects and collaborations in interdisciplinary research teams.

All of these have been demanding tasks, but have also proved to be rewarding, especially in terms of improvement of my scientific autonomy and self-esteem. These achievements have benefited from a congenial synergy between a solitary research work and fruitful collaborations and discussions with academic and non-academic colleagues and the crucial support of my supervisors. Furthermore, the goals of giving an original contribution to academic knowledge and inspiring more socially and ecologically just nature conservation policies and practices have motivated me to overcome the toughest time of my PhD journey. The management of such a long-term project has also required organizational skills to accomplish short-term goals.

Besides acquiring knowledge on my research topic and improving my competences as a researcher, I have gained personal experience in challenging dichotomous approaches and disciplinary boundaries. In particular, the doctoral programme on Global Studies, the integration in the ecological economics and environmental management group of CENSE - the Center for Environmental and Sustainability Research, and the complementary backgrounds of my supervisors, have provided me an inspiring environment. Indeed, this has reinforced and expanded the range of outcomes of the interdisciplinary learning experience enjoyed during the Master course in International Relations. The exploration and use of socio-ecological systems approach, complex system thinking and the concept of wicked problem have also played a relevant role. I believe that these holistic approaches are not only necessary for addressing the big puzzle of sustainability, but also crucial for deepening the understanding and refining the analysis of contemporary societies.

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Appendix I

Interview script (Research line A)

1. Script for semi structured interview to representatives of the National Authority and central administration (in Portuguese).

1. Qual tem sido o papel do Estado/administração central na criação de áreas protegidas e classificadas (e.g. Rede Natura 2000)? Mudou durante as últimas décadas?

- houve propostas de criação de áreas protegidas por parte de atores locais e da sociedade civil?

2. Qual tem sido o papel do estado (e.g. ICNF) na gestão de áreas protegidas? E de áreas classificadas? Mudou durante as últimas décadas?

- Qual o papel e o poder dos municípios nas Comissões directivas das áreas protegidas de âmbito nacional? Qual o papel das associações locais (e.g. nos conselhos consultivos)?
- As ong são parceiras locais do ICNF na gestão de áreas classificadas Rede Natura 2000?

3. Pode indicar etapas (e.g. fatores institucionais/legislativos) que mudaram o papel da autoridade nacional (hoje ICNF) em relação à criação de áreas protegidas? E à gestão?

- A partir do Decreto Lei n. 19/1993 que cria a RNAP, e reconhece a possibilidade das CM de criar AP, acha que houve uma mudança no papel de estado na criação e gestão de áreas protegidas?
- Houve uma descentralização do poder no caso das novas áreas protegidas (AP) locais? Já existiam exemplos de AP locais que foram reconhecidas graças ao Decreto Lei n. 19/1993?
- Qual a diferença entre as áreas protegidas locais indicadas no Decreto Lei n. 19/1993 e as do Decreto Lei n.142/2008

4. O Decreto Lei n. 142/2008 reconhece também áreas protegidas privadas

- Qual acha que foi o objetivo do legislador?
- Como explica o facto de existir só uma AP privada até hoje em Portugal?

5. Segundo o Decreto Lei n. 142/2008 as tarefas de gestão das áreas protegidas podem ser contratualizadas com entidades públicas ou privadas (art.13). Esta medida está a ser usada?

6. Em relação as competências e recursos do ICNF.

- Qual foi a redefinição das competências com a fusão com a AFN em 2012?

- Houve alteração dos recursos financeiros e humanos? E de poder na gestão da áreas protegidas e classificadas? Surgiram conflitos?

7. Qual a presença “no terreno” do ICNF? Mudou ao longo das ultimas décadas?

- Quando foram criados e como funcionam os serviços desconcentrados?

O futuro das políticas de conservação da natureza e gestão de AP

8. Quais são os problemas e futuros desafios da Rede Nacional de áreas protegidas e classificadas?

9. Como vê a evolução das políticas de conservação da natureza em Portugal em relação à *governance* das APs?

- Acha eficaz/relevante um modelo de governação integrada/co-governance para AP para resolver os problemas indicados?
- Qual no seu entender devia ser o papel do estado?

10. Existem outros aspetos que considera importante para a análise da interação entre administração central e ONGAs, na criação e gestão de áreas protegidas?

2. Script for representatives of environmental NGOs (in Portuguese).

*Note that the two scripts of the Appendix I were adapted for other categories of interviewees, namely for scholars and representatives of the National Commission on Environment and Sustainable Development (CNAD).

1. A vossa ONG gêre áreas com objetivos de proteção da natureza?

- A partir de quando? Quais são as principais motivações e objetivos?
- Através quais mecanismos está a ser gerida? (contratos com proprietários, arrendamento, aquisição etc..)
- Como está a ser financiada a gestão? (projetos nacionais; EU; internacionais...)

2. Nos casos em que foram comprados os terrenos pela ONG

- Como foi financiada a compra? Qual o percentagem dos donativos privados? (na compra e gestão) Aplicaram-se incentivos fiscais?
- Porque foi necessaria a aquisição?
- Trata-se de uma área na Rede Natura 2000 ou não classificada (na altura da aquisição de terrenos e agora)?

3. Os projetos estão a decorrer com a parceria de entidades públicas ou privadas?

- Se sim, porque sentiu-se a necessidades de estabelecer parcerias?
- Qual a relação com a Câmara municipal?
- Qual a relação com o ICNF?

4. Conhecem a possibilidade de fazer um pedido para o ICNF reconhecer a área como área protegida privada (APP) e integrá-la na rede nacional de áreas protegidas? Já fizeram? Se não, porque?

- Como explica o facto de existir só uma APP até hoje em Portugal?
- Acha que em futuro a ONG onde trabalha poderá estar interessada em criar uma APP?
- Quais incentivos podem ser implementados para que o instrumento seja mais “apelativo”?

5. Quais as maiores ameaças que as área(s) gerida(s) pela vossa ONG está ou vai ter que enfrentar?

6. Como mudaram os recursos acessíveis para a vossa ONG durante as últimas décadas? E no caso particular da AP que gerem?

7. Segundo o Decreto Lei n. 142/2008 as tarefas de gestão das áreas protegidas podem ser contratualizadas com entidades públicas ou privadas (art.13).

- Esta medida está a ser usada pela vossa ONG?

8. Conhece casos de ONGs/associações ou empresas a gerir áreas com o objetivo de proteção da natureza?

Appendix II

Interview script (Research line B)

Questions	Objectives *
1. Quais foram as motivações que levaram a implementar ações para a conservação da natureza nesta área?	Contextual
2. Quais as motivações para a sua formalização como área protegida através duma parceria público-privada- (CM)?	Contextual
3. Qual foi o papel da ONG/ICNF na formalização da APP?	Contextual & Social Fit
4. Quais são os objetivos da gestão da área e as atividades que têm sido desenvolvidas (preservação, educação etc.)?	Contextual & Social Fit
5. Qual o papel de cada um (ICNF/ONG) na gestão da área? E como têm sido as relações entre eles?	Contextual & Social Fit
6. Como estão a ser/têm sido envolvidos os stakeholder locais?	Contextual & Social Fit
7. Quais os maiores desafios/ futuras ameaças para a gestão da área?	Contextual
8. Como podia ser melhorado o modelo institucional das AP em termos de estrutura (atores), processos (tomada da decisão) e instrumentos (e.g. gestão ou incentivos)?	Contextual & Social Fit & Ecological Fit
9. Considera a ATN/Geota capaz de gerir a área com o objetivo de conservação da natureza? Em que medida?	Social Fit A (Legitimacy)
10. A informação relevante está disponível? (e.g. protocolo de gestão, relatórios anuais de gestão)	Social Fit A (Transparency)
11. Consegue ter acesso a essa informação? Em que medida?	Social Fit A (Transparency)
12. Existem oportunidades para o envolvimento de stakeholders no processo de tomada de decisão sobre a criação da APP e a sua gestão? Quais?	Social Fit A (Inclusiveness)
13. Está satisfeito com a forma como as decisões são tomadas? Em que medida?	Social Fit A (Inclusiveness)
14. O protocolo da APP define claramente direitos e responsabilidades dos atores?	Social Fit A (Accountability)
15. Em que medida as ações de monitoramento e outros processos de avaliação são efetivamente implementadas?	Social Fit A (Accountability)
16. A APP tem tido algum impacto em práticas anteriores associadas à área a que se refere?	Social Fit A (Fairness)
17. Os custos e benefícios associados à APP são distribuídos de forma justa?	Social Fit A (Fairness)
18. A gestão da APP é articulada com outras políticas públicas a nível local e nacional?	Social Fit B (Connectivity)
19. Existem instituições formais ou informais e processos para gerir a APP de forma adaptativa (e.g. gestão do risco)?	Social Fit B (Resilience)
20. Os processos de aprendizagem social e técnica são apoiados? Como? (como se apoia a aprendizagem social?)	Social Fit B (Resilience)
21. Há congruência entre o problema ecológico gerido e a localização e extensão da APP?	Ecological Fit (Spatial)
22. O prazo do contrato permite gerir de forma eficaz o problema ecológico identificado?	Ecological Fit (Temporal)
23. Existem instituições formais ou informais e processos para gerir a APP de forma adaptativa (e.g. mudanças climáticas etc)	Ecological Fit (Temporal)
24. Como estão a ser geridos os sistemas ecológicos na APP?	Ecological Fit (Functional)

Notes: * see table 6.4 - The diagnostic framework

Appendix III

Research outputs

In line with the PhD Regulations of the Faculdade de Ciências Sociais e Humanas - Universidade Nova de Lisboa, research works adapted to form an integral part of the dissertation, ideas and arguments presented in this thesis were also published or accepted for publication as papers and book's chapters.

Publications

Peer-reviewed journals

Iannuzzi G., Mourato J., Santos R. (forthcoming) Towards a multidimensional framework to assess the social and the ecological fit of institutional arrangements for private protected areas. *Parks-IUCN Journal*

Iannuzzi G., Santos R., Mourato J. (2019) The involvement of non-state actors in the creation and management of protected areas: insights from the Portuguese case. *Journal of Environmental Planning and Management*, 63 (9): 1674-1694.

Iannuzzi G. (2018) The significance of Polanyi's contribution: an interpretation of the neoliberalization and commodification of nature. *JANUS.NET e-Journal of International Relations*, 9 (1): 38-52.

Iannuzzi G. (2016) Private Protected Areas as policy instruments to tackle environmental challenges: discussing potentialities and pitfalls. *Revista de Geografia e Ordenamento do Território (GOT)* 10: 189-206.

Book chapter

Iannuzzi G., Mourato J. (forthcoming) *Alternative* arrangements for nature conservation? Debating innovation brought on by private protected areas' institutional models in four European countries. « Ensemble » MSH - Mondes, Université Paris Nanterre.

Conference proceedings

Iannuzzi G., Mourato J. (2017) Privately protected areas as a policy tool for nature conservation: the case of Portugal. *Proceedings of the IX Portuguese Sociological Conference "Portugal Território de territórios"* 6-8 June 2016, Faro.

Additional research outcomes include the following:

Oral presentations

International conferences

Iannuzzi G., Santos R., Mourato J. "Co-governance arrangements for nature conservation: insights from the Portuguese case" XII European Society for Ecological Economics Conference, 20-23 June 2017, Budapest.

Iannuzzi G. "Protected areas in Portugal: which opportunities for collective management?" Conference TRANSE-AC "TRANSition Sociale et Environnementale: Alternatives et Communs", 22-24 March 2017, Paris. Nanterre.

Iannuzzi G., Santos R., Mourato J. "Private protected areas in Europe: what role for public organizations?" 22nd International Sustainable Development Research Society Conference, 11-15 July 2016, Lisbon.

National conferences and workshops

Invited speaker: Conference "Proteger a vida terrestre - Desafio 2030 uma agenda para o desenvolvimento sustentável", Fundação INATEL, 28 November 2017, Manteigas.

Iannuzzi G. "Private protected areas: an alternative to exclusion in protected areas or a neoliberalization of nature?" Workshop TRANSE-AC "TRANSition Sociale et Environnementale: Alternatives et Communs", 15-18 September 2016, Valencia.

Iannuzzi G., Mourato J. "Privately protected areas as a policy tool for nature conservation: the case of Portugal." IX Congresso Português de Sociologia. Associação Portuguesa de Sociologia, 6-8 June 2016, Faro

Iannuzzi G., Santos R., Mourato J. "Private protected areas in Europe. What role for public actors?" PhD Workshop Territórios e comunidades à margem, 16-20 May 2016, ICS-ULisboa, Lisbon.

Visiting

Visiting PhD Student at the Institute of Landscape Development, Recreation and Conservation Planning, University of Natural Resources and Life Sciences (BOKU), Vienna, July-August 2019.